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Understanding the relationship between the regional context and the process of creation of new ventures

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Politecnico
di Bari

Department of Mechanics, Mathematics and Management
MECHANICAL AND MANAGEMENT ENGINEERING

Ph.D. Program 36°

**SSD: ING-IND/35–Business and Management
Engineering**

Final Dissertation

Understanding the relationship between the regional context and the process of creation of new ventures

by

Loporcaro Claudio

Supervisors:

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Prof. Giuseppe Pompeo Demelio

Course n°36, 01/11/2020-31/10/2023



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LIBERATORIA PER L'ARCHIVIAZIONE DELLA TESI DI DOTTORATO

Al Magnifico Rettore
del Politecnico di Bari

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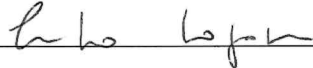
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To whom it may concern

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INTRODUCTION

The creation of a new venture is a central topic in the entrepreneurial literature (Davidsson et al., 2020; Shepherd et al., 2021; Vogel, 2017) since it plays a major role in the development and growth of regional economies (Gu & Qian, 2019; Xu et al., 2021). Scholars are considering the creation of a new venture as a process triggered by human intentions and actions to transform a business idea into a viable business activity (Baron & Markman, 2018; McMullen & Dimov, 2013; Shane & Venkataraman, 2000; Vogel, 2017). The process has been described as dynamic, it may be linear or iterative, and it is characterized by three main phases, namely generation, development, and exploitation (Davidsson & Gruenhagen, 2021). The adoption of the creation process framework helped entrepreneurial scholars overcome the discovery-creation stalemate (Davidsson, 2023), and extend the entrepreneurial phenomenon beyond the entrepreneurial-hero vision (Vogel, 2017). Actually, in this way, entrepreneurial scholars recognized the importance of other elements that are contingent on the new venture (Davidsson et al., 2020). In fact, the creation of new ventures does not happen in a vacuum, but it is embedded in an environmental and social context that influences the different stages of the process (Vogel, 2017). The importance of the context is highlighted by recent studies that have focused on the characteristics of the region in which the process of creation happens (Autio et al., 2014; Dahl et al., 2010; Garud et al., 2014; Muñoz et al., 2022), to better understand its dynamics (Marquis & Battilana, 2009). Studies in this stream focused on how elements of a regional context may foster entrepreneurial intentions (Davidsson, 1995; Kibler et al., 2014), favor the creation of entrepreneurial opportunities (Kibler et al., 2014), sustain new firms in acquiring relevant knowledge (Hussler, 2004), provide human, social, and financial capital (Audretsch & Keilbach, 2004), and facilitate the interaction within clusters and networks (Hervas Oliver et al., 2017; Spigel, 2013).

However, studies investigating the region's role in the creation of new ventures considered the creation phenomena as an event rather than as a process (Sternberg, 2022). As a consequence, the relationship between the region and new ventures is viewed as static, with a relatively scant focus on the region's impact across each phase of the new venture's creation. The adaptation of a dynamic perspective is important since the creation of a new venture is an evolving process in which the new venture's needs vary (Lichtenstein & Brush, 2001; Marcon & Ribeiro, 2021) and, subsequently, the new venture's relationship with the external environment. Furthermore, the static view led studies in this area to mainly use a top-down approach that assumes new ventures as passive agents within the region and the regional context to be easily shaped by highly hierarchical actors (Thompson et al., 2018). As a consequence, governments have been trying to implement policies aiming to emulate successful regions, such as Silicon Valley and Route 128, however obtaining poor results (Thompson et al., 2018). In fact, while some regional structures and elements might be easy to replicate in different contexts (Aversa et al., 2021), some are instead idiosyncratic to a place, being “sticky” and accessible only in the region's proximity. All things considered, there is a lack of understanding of the relationship between new ventures and regional context. More specifically, the extant literature scanty discusses how the new ventures exploit the regional context and, in turn, how the regional context influences and sustains the creation of a new venture.

Accordingly, the aim of the research performed during my PhD is to offer a dynamic view of the relationship between the regional context and the creation of new ventures. Particularly, the focus of this thesis is on the entire creation process, investigating how new ventures make use of regional characteristics, especially those idiosyncratic, through a bottom-up approach. In addition to the aforementioned theoretical relevance behind this research, new ventures are deemed as a source of economic, social, and innovative regional

development (Gu & Qian, 2019; Xu et al., 2021). Therefore, a better understanding of how to support the creation of new ventures may provide benefits to both academics and practitioners.

The study I performed, to address these gaps, is made of three main phases. In the first phase, through a single case study, I aim at investigating how the regional legacy - a peculiar element of a region resulting from the industrial and business tradition and culture (Aoyama, 2009) - supports the successful completion of the creation process. In this way, I describe how specific and idiosyncratic resources of a location are critical to a new venture, highlighting the importance of its location. In the second phase, through a multiple case study, I analyze how the regional industrial and business traditions - that are elements constituting the regional legacy - are developed and diffused within a region through entrepreneurial initiatives. In particular, by describing how new ventures leverage the knowledge developed by regional anchor firms, I shed light on how the new ventures interact with the local environment by sourcing regional resources necessary for the creation process while contributing to regional development. Finally, in the third phase of the research, I aim to understand how the presence (or the lack) of relevant resources for the creation process in the region affects the new ventures' location decisions. In particular, in this phase, I investigated the location decision of new ventures through multiple case studies, providing insight into the entrepreneurial agency in an entrepreneurial ecosystem. The three stages described above correspond to the three chapters of this thesis.

In detail, in the first chapter of the thesis titled “Regional Legacy Effects on Radically Innovative New Ventures’ Risks”, I performed a study on the influence of the regional legacy on the process of new venture creation. New ventures, in their quest to create a viable business, face risks that hinder their likelihood of surviving (Soto-Simeone et al., 2020). Those risks are associated with the lack of legitimacy and the liability of newness (Aldrich

& Fiol, 1994). In particular, the lack of legitimacy arises from an inadequate understanding of what a new venture does among crucial stakeholders (Aldrich & Fiol, 1994; Zimmerman & Zeitz, 2002), hindering their potential exploitation. The liability of newness, on the other hand, stems from the lack of resources and capabilities of new ventures compared to more established firms (Soto-Simeone et al., 2020; Stinchcombe, 1965). Those risks are particularly critical for Radically-Innovative New Ventures, a typology of new ventures characterized by a unique value proposition that entails a high degree of risk (Kumar et al., 2000). Despite the existing research, there is a scant understanding of how the regional legacy supports the new venture to overcome the risks that threaten their survival (Kuratko et al., 2017). To do so, I adopted a qualitative approach on the basis of a single case study. The case study allowed to identify the mechanisms used by radically-innovative new ventures to increase their legitimacy and reduce the liability of newness by exploiting the elements of the regional legacy. This research contributes to the entrepreneurship field by elucidating the dynamics affecting the creation of new ventures and their likelihood of survival (Shepherd et al., 2000; Soto-Simeone et al., 2020). Furthermore, with this study, I increase our understanding of the role of the peculiar regional resources that comprise industry and business tradition in the creation process (Aoyama, 2009) by describing how the regional legacy supports new ventures in overcoming the risks related to lack of legitimacy and liability of newness.

Following the results of the first chapter, the second chapter, titled “Entrepreneurial Recycling in the Aftermath of Anchor Firms’ Crisis”, investigates how the knowledge developed in an anchor firm is exploited for the creation of a new venture. Anchor firms are instrumental in defining regional development by creating and diffusing knowledge (Agrawal & Cockburn, 2003). This knowledge shapes regional industrial R&D as well as local universities to generate knowledge that accommodates the specific requirements of the

anchor firm's markets, addressing both the supply and demand aspects (Agrawal & Cockburn, 2003). The diffusion of knowledge within a region is favored by human resources (Jofre-Monseny et al., 2017), through formal or informal contacts (Dahl & Pedersen, 2004) or mobility (Beer et al., 2019). However, in the aftermath of an anchor firm crisis, individuals might face long-term unemployment, be re-employed in different industries, or emigrate, hindering the mechanisms of knowledge diffusion (Hoetker & Agarwal, 2007). Nonetheless, the transition to entrepreneurship has been identified as a way to preserve valuable knowledge while reducing the negative effects of anchor firms' crises (Nyström, 2020; Spiegel & Vinodrai, 2021), such as the loss of employment opportunities (Blanchard & Katz, 1992) and the disruptions in local supply and demand (Sorenson, 2017). Despite acknowledging the relevance of the transition of individuals from employment to entrepreneurship following a firm crisis, the literature falls short of understanding how those individuals leveraged their specific knowledge for the creation of new ventures (Nyström, 2020; Spiegel & Vinodrai, 2021). To address the gap, I performed a multiple case study, based on primary data collected through interviews with individuals that created a new venture after leaving an anchor firm, as Olivetti, in crisis. In this way, the study relies on data that offers a more nuanced understanding of individual experiences and the new venture creation process (Beer et al., 2019). By delving into technological, managerial, and market knowledge (Acs et al., 2013; Qian & Acs, 2013), I developed a framework that describes how each typology of knowledge is exploited in the different phases of new venture creation. In this way, this thesis also contributes to understanding how human resources and their knowledge are recycled within an entrepreneurial ecosystem and explores the dynamics of new venture creation as a response to anchor firms' crises (Spiegel & Vinodrai, 2021).

Finally, in the third chapter, titled "Entrepreneurial Mobility: a Resource-Based Investigation about the Decision to Leave", I investigated how the set of resources necessary

for the creation process influences the new ventures' decision to leave their home regions during the creation process. Selecting an appropriate location for a new venture is a critical strategic decision that significantly influences the venture's resources availability and utilization (Sirmon et al., 2011). Extant research has highlighted the preference of founders to locate their ventures in their home regions, often driven by the advantages of being embedded in a familiar context (Dahl & Sorenson, 2009; Dahl & Sorenson, 2010, 2012). However, new ventures may opt to move, seeking advantageous ecosystems with abundant resources and supportive entrepreneurial environments (Butler et al., 2020). While previous studies have acknowledged that the location decisions for new ventures can happen during the different phases of creation, the phenomenon has been studied as a static event occurring at the inception of the creation process (Butler et al., 2020). This perspective overlooks the dynamic nature of location decisions and how the decisions may vary in response to changing resource needs and goals throughout the venture creation process. Additionally, existing studies have only focused on specific types of resources, such as financial or social capital (Butler et al., 2020), without providing a comprehensive understanding of the different resources a new venture needs. Hence, this study addresses the research gap by using a qualitative study approach. In particular, I performed multiple case studies interviewing founders of new ventures that have moved during the creation process. As a result, I constructed a framework describing the influence of different resources - such as financial, social, innovation, organizational, physical, and human (Marcon & Ribeiro, 2021) - on the location decision changes in each phase of the new venture creation process. By exploring the interplay between resource needs and local resource availability, this research aims to provide a nuanced understanding of how new ventures navigate location decisions and how resources influence the creation process.

CHAPTER 1. REGIONAL LEGACY EFFECTS ON RADICALLY INNOVATIVE NEW VENTURES' RISKS

1. INTRODUCTION

Innovative New Ventures (INVs), defined as those ventures characterized by some degree of novelty in the value offered to customers (Bruyat & Julien, 2001; Dyer et al., 2008), represent one of the main topics of interest within the entrepreneurship research field (Shepherd et al., 2021), since they are deemed as the true source of economic growth and a relevant driver of regional development (Gu & Qian, 2019; Xu et al., 2021). In fact, INVs are associated with job creation, technological development, increased competitiveness, and innovation within a region (Berleermann & Jahn, 2016; Brixy, 2014). The survival of INVs represents an important issue since the likelihood of ceasing their business activities in the aftermath of their founding is high (Hyytinen et al., 2015), due to the superior risks they face compared with more traditional ventures (Koellinger, 2008). For this reason, academia and governments have been looking for factors that sustain the INVs when facing risks that threaten their survival (Samuelsson & Davidsson, 2009). Extant studies suggest that the main challenges that reduce the likelihood of survival of INVs derive from the lack of legitimacy (Aldrich & Fiol, 1994) and the liability of newness (Stinchcombe, 1965) affecting these firms. On the one hand, the lack of legitimacy is the risk that stems from the lack of knowledge and understanding about the INVs (Suchman, 1995; Zimmerman & Zeitz, 2002) that may lead crucial stakeholders (e.g., investors, suppliers, customers) to underestimate the potential of the INVs (Zimmerman & Zeitz, 2002), hence hindering the successful exploitation of the opportunity they identified. On the other hand, the liability of newness is related to the lack of resources and capabilities that leads INVs to suffer a competitive disadvantage in comparison with incumbent firms (Stinchcombe, 1965). The extent of these

risks is not equal among all INVs, but it varies with the novelty of an INV along a continuum (Shepherd et al., 2000). In particular, radically-INVs, being based on a unique value proposition (VP) (Dyer et al., 2008; Kumar et al., 2000), are characterized by the highest degree of novelty and, accordingly, they face the highest lack of legitimacy and liability of newness. Therefore, research on elements and mechanisms that sustain the survival of these ventures is particularly important, since their failures potentially limit the largest impacts on society. For this reason, this analysis is focused on radically-INVs, as they bring higher benefits to society, while facing higher risks.

In particular, whereas extant studies mainly focused on the entrepreneurs' characteristics (Baumol et al., 2009; Koellinger, 2008; Schmitt et al., 2018; Vivarelli, 2013), investigations about how the context affects INVs have been increasingly gaining prominence (Autio et al., 2014; Garud et al., 2014; Muñoz et al., 2022). Following this line of investigation, this study focuses on the context surrounding the INVs and, specifically, on the cultural elements and business and industrial traditions of the regional context in which the INV is embedded. In fact, the work shows that the relevance of these elements is paramount to better investigate the dynamics affecting the survival of the INVs (Fritsch & Wyrwich, 2018). To better characterize these elements, Aoyama (2009) introduced the concept of the Regional Legacy (RL), defined as the combined result of the regional culture with the business and industrial tradition of the region. The RL plays an important role for the INVs since it shapes the creation of new opportunities (Messeni Petruzzelli & Savino, 2015), and influences both entrepreneurial intentions (Donaldson et al., 2021; Huggins & Thompson, 2016; Wigren-Kristoferson et al., 2022) and entrepreneurial action (Hayton & Cacciotti, 2013). Despite investigating several aspects related to the survival of INVs, the extant literature has overlooked the relationship between the RL and the extent of the risk faced by the INVs, with few notable exceptions (e.g., Kuratko et al., 2017). In particular,

Kuratko et al. (2017) analyzed the strategies to achieve different levels of legitimacy within and beyond a regional context but did not investigate the role of the RL in sustaining the INVs in mitigating the risks. Therefore, a systematic understanding of how the regional context influences the risks INVs face needs further exploration. This study aims to address this gap by answering the following research questions: how the RL sustains a radically-INV in gaining legitimacy? (RQ1), and how the RL sustains a radically-INV in reducing the liability of newness? (RQ2).

To answer these RQs, the research investigates how the RL influences the effectiveness of radically-INV in facing risks. To do so, it was performed a qualitative single case study about Astroscale, a radically-INV in the space industry, endowed with a unique and novel VP in the on-orbit services that makes it suitable for addressing the research questions. The analysis of the case study shows that the RL backed Astroscale is gaining legitimacy by leveraging the cultural and traditional elements of a region and overcoming the liability of newness by providing the knowledge and resources necessary to survive.

This study provides theoretical contributions to the entrepreneurship literature and, in particular, to the lineage of study focusing on the survival of INVs. Firstly, by highlighting new elements and mechanisms that can support radically-INV in gaining legitimacy and reducing the liability of newness, the research enhances the understanding of the dynamics that contribute to the survival of radically-INV. Secondly, the study advances the comprehension of the relationship between the regional context and the likelihood of survival of radically-INV, highlighting the relevance of the context in coping with the risks these firms face. In particular, the work describes how the RL becomes increasingly paramount for INVs characterized by the highest degree of innovativeness.

On the practical side, the study offers insight to entrepreneurs and policymakers. In the process of starting a radically-INV, entrepreneurs can leverage regional elements to communicate their VP to customers and stakeholders and gain legitimacy. Furthermore, entrepreneurs can decide to start the radically-INV where the culture and tradition are in line with the value proposed by exploiting the RL of the area. For policymakers, on the other side, nurturing the culture and tradition of the region can help to create the right environment for the survival of radically-INV.

2. THEORETICAL BACKGROUND

A new venture is a firm newly created that is in the process of exploiting the entrepreneurial opportunity identified and turning it into a viable business (Davidsson & Gruenhagen, 2021). The survival of new ventures is a critical topic in the entrepreneurship literature due to the losses that entrepreneurs, investors, and society can suffer if the new venture does not survive (Soto-Simeone et al., 2020). The concept of survival is strictly related to the failure, which indicates the termination of the new venture as an economic entity (Chrisman et al., 1998). Accordingly, I consider the survival of a new venture as the achievement of financial viability (Davidsson & Gruenhagen, 2021; Newbert, 2005; Soto-Simeone et al., 2020). The topic is increasingly important for INVs since their likelihood of survival is lower than their counterpart (i.e., imitative new ventures that replicate extant business practices) (Hyytinen et al., 2015). INVs are characterized by introducing a different degree of novelty in terms of new products, services, processes, or organizational structures to create new value for customers (Bruyat & Julien, 2001). These ventures exhibit an exploratory propensity leading them in anticipating future demands, and creating and shaping the business environment (Li et al., 2018). INVs are recognized as a driver of economic growth within a region (Gu & Qian, 2019) providing wealth for entrepreneurs and society (Shepherd et al., 2021). In addition, the literature found that INVs are sources of

solutions to societal issues (Williams & Shepherd, 2016), technological improvement (Vivarelli, 2013), job creation, and prosperity (Koellinger, 2008; Vivarelli, 2013). Finally, INVs are responsible for the disruptive effects on existing markets (Trabucchi et al., 2019) that may lead to the emergence of new sectors (Aldrich & Fiol, 1994; Schumpeter, 1942). All those features have attracted the attention of scholars and policymakers who are looking for mechanisms that sustain the survival of INVs (e.g., Shepherd et al., 2000; Soto-Simeone et al., 2020; Zimmerman & Zeitz, 2002).

2.1. The Risks Associated with the Innovative New Ventures: Lack of Legitimacy and Liability of Newness

An INV faces a certain level of risk which increases with its innovativeness (Koellinger, 2008). In particular, the major risks that threaten the survival of INVs are the lack of legitimacy (Aldrich & Fiol, 1994; Zimmerman & Zeitz, 2002) and the liability of newness (Stinchcombe, 1965).

The lack of legitimacy derives from the poor understanding of the nature of the INVs (Aldrich & Fiol, 1994; Suchman, 1995). There are two types of legitimacy that ventures have to gain to foster their chances of success and survival, i.e., cognitive and sociopolitical (Aldrich & Fiol, 1994; Bitektine, 2011; Zimmerman & Zeitz, 2002). Cognitive legitimacy refers to the common understanding of what an INV does (Aldrich & Fiol, 1994; Zimmerman & Zeitz, 2002). The sociopolitical legitimacy, instead, is the perception of an INV as not desirable, proper, or appropriate with respect to the extant principles, rules, and standards by critical stakeholders (Zimmerman & Zeitz, 2002). Lacking legitimacy may hinder the capacity of the venture to retrieve capital, receive governmental support, and convince skeptical customers about its offering (Aldrich & Fiol, 1994). Consequently, the INVs may not be able to successfully exploit the opportunity identified (Zimmerman & Zeitz, 2002), relegating themselves to a niche market (Ansari et al., 2016), or even not survive (Aldrich &

Fiol, 1994). To overcome the lack of legitimacy, INVs can implement strategies that help to gain legitimacy. A strategy is conforming, which refers to aligning the practices and norms with existing ones (Kuratko et al., 2017; Zimmerman & Zeitz, 2002). However, such a strategy is not always fully adoptable by radically-INV which creates new practices and norms. Another strategy is manipulating, according to which the INVs try to make changes in the established set of practices, values, and norms in a way that the INVs appear appropriate and right (Kuratko et al., 2017; Zimmerman & Zeitz, 2002). Finally, storytelling, in which the INV draws stories to build an identity and gain legitimacy (Lounsbury & Glynn, 2001).

The other risk that threatens the survival of INVs is the liability of newness that arises from the lack of resources and capabilities required to compete with incumbents (Stinchcombe, 1965). INVs lack a structured internal organization, such as the definition of roles, relationships, incentives, and established routines (Soto-Simeone et al., 2020). In addition, INVs lack of resource endowment and the acquisition of the necessary resources and capabilities can become a costly and time consuming process that may lead to temporary inefficiencies (Stinchcombe, 1965). All those elements limit the ability of an INV to successfully exploit the opportunity identified, thus leading to its failure. The extant literature recognizes the importance of social capital and the construction of a network for INVs in reducing the liability of newness (Soto-Simeone et al., 2020; Zhou et al., 2010). The magnitude of those risks increases with the level of novelty of the INVs. INVs cannot build legitimacy on their history (Marquis & Battilana, 2009), but they may lean on ventures that present traits of similarities (Hannan & Freeman, 1984). Therefore, the more an INV detaches itself from existing value propositions, practices, and standards, the higher the lack of legitimacy it faces (Bitektine, 2011). Similarly, the more an INV differentiates itself from existing practices and routines, the more it struggles to establish new organizational roles

and systems, thus facing a higher liability of newness. However, INVs have been analyzed as a single typology of firms (e.g., Cliff et al., 2006; Koellinger, 2008; Samuelsson & Davidsson, 2009). To better understand the complexity of the phenomenon, the literature has characterized the innovativeness of INVs along a continuum, that goes from incremental to radical, according to the degree of differentiation with respect to the existing practices (Herrmann, 2019; Kumar et al., 2000). In particular, this work focuses on radically-INVs, those ventures with a unique VP that is dramatically different from existing ones (Kumar et al., 2000) since they are subjected to those risks.

2.2. Regional Legacy

Research activities on INVs have focused on the characteristics of the context in which INVs are embedded (Autio et al., 2014; Dahl et al., 2010; Garud et al., 2014; Muñoz et al., 2022), to better understand their dynamics (Marquis & Battilana, 2009). In particular, studies investigated the local or regional level, which is considered the most proximate geographical area of the INVs (Spigel, 2013). Studies in this stream focused on how elements of a regional context, such as industries (e.g., Aoyama, 2009; Fritsch & Falck, 2007; Gherhes et al., 2020), clusters (e.g., Davidsson, 1995), embedded knowledge (e.g., Agarwal et al., 2010), culture (e.g., Aoyama, 2009; Arrak et al., 2020; George & Zahra, 2002; Kalisz et al., 2021; Sweeney, 1991) and tradition (e.g., De Massis et al., 2016; Messeni Petruzzelli et al., 2020; Messeni Petruzzelli & Savino, 2015) play a paramount role in the creation, emergence and survival of INVs. To highlight the combined effect of culture and industrial and business tradition, Aoyama (2009) introduced the concept of RL, which is the result of the combined effect of a region's dominant business and industry practices, and regional culture. The RL influences INVs since it shapes and frames business opportunities, entrepreneurial insights, and expectations, through the definition of potential risks, incentives, dominant norms, and

practices of interaction among actors in the region (Aoyama, 2009). Specifically, the RL represents the context surrounding entrepreneurs (Spigel, 2013) which influences individuals (Castaldi & Dosi, 2006) and, consequently, the decision to start acting on the entrepreneurial opportunity (Huggins & Thompson, 2016; Wigren-Kristoferson et al., 2022). In fact, it shapes personal motivation, institutional environment, and external business culture which are elements that frame the entrepreneurship process (Nijkamp, 2003).

The cultural aspect of the RL is a supportive element to the entrepreneurial action, in particular, to stimulate creative and innovative behaviors, and favor the acceptance of uncertainty and risk-taking (Hayton & Cacciotti, 2013). The cultural proximity among individuals living in a region contributes to the development of context-specific ‘know-how, know-why, know-what, and know-who’ forming the regional knowledge base (Hussler, 2004 525). At the same time, new ventures may also use the regional culture as an asset to facilitate resource inflow (Lounsbury & Glynn, 2001) and to appropriate the value created (Messeni Petruzzelli et al., 2020).

Tradition, the other element comprising the RL, is associated with the rate of new venture creation (Fritsch & Falck, 2007), the emergence of new industries (Aoyama, 2009; Binz et al., 2016), and the creation of new opportunities (Messeni Petruzzelli & Savino, 2015). The emergence of a new industry is strongly contingent on the historical industrial structure of a region (Binz et al., 2016) since the practices and structures of current entrepreneurial activities echo cultural elements imprinted decades earlier (Audretsch et al., 2017). Finally, the mindsets, values, and practices developed within a regional industry can span sectoral boundaries and influence entrepreneurship in a new industry in the same region (Aoyama, 2009).

In conclusion, the RL is explicative of the importance of regional culture and historical economic development. It describes the result of the evolution of the regional culture, how it affects new entrepreneurial activities (Hervas Oliver et al., 2017; Spigel, 2013), and the emergence and establishment of new industries (Aoyama, 2009; Sweeney, 1991). Despite recognizing the importance of INVs, the role of RL in supporting INVs in dealing with the risks they face has received scarce relevance in the literature. For this reason, this work aims at addressing this gap by answering the RQs previously identified.

3. METHODOLOGY

This work adopted a single case study research methodology. This methodology is very useful for developing a rich understanding of complex phenomena (Eisenhardt & Graebner, 2007; Javadian et al., 2020) and it helps to address the “how” and “why” questions (Yin, 2009). The mechanisms that govern the relationship between RL and the risks of INVs are the results of a complex phenomenon that lacks a systematic understanding, and the qualitative approach offers the possibility for deep exploration and effective theory building (Eisenhardt, 1989). The research design is described hereafter and is composed of three steps: case selection, data collection, and data analysis.

3.1. Case Selection

To answer the research questions, Astroscale was selected as the case study for several reasons. First, the venture, operating in the space industry, exhibits a high degree of novelty in terms of VP, being a pioneer in the on-orbit service. Second, Astroscale is a “survived” new venture since it has signed contracts with several customers for different missions, hence becoming a viable business. Third, Japan, the regional context surrounding the venture, is characterized by distinct and peculiar elements that are sharply identifiable.

For those reasons, Astroscale represents an “extraordinary” case that is a suitable choice to investigate and answer the research questions (Siggelkow, 2007).

Astroscale was founded in 2013 in Singapore. Its founder, the Japanese entrepreneur Nobu Okada, was living in Singapore during that period, and he saw the “neutral” position of Singapore in the space sector as an element to avoid contrast with other space agencies. In fact, one of the worries of the Japanese entrepreneur was that the technology developed by Astroscale could have been seen as a threat by the US, China, and Russia. Two years after the establishment of the new venture, the core functions of Astroscale were moved to Tokyo. The venture selected a location that was more in line with the business opportunity they wanted to exploit (Zimmerman & Zeitz, 2002). The vision of Astroscale is to ensure that future generations can access a safe and sustainable space environment. Astroscale is a pioneer in the space industry, being one of the first ventures to offer on-orbit services (e.g., in situ space situational awareness, satellite life extension and end-of-life management, and active debris removal) with the intent to protect satellites' operations, help to manage regulatory risk and reduce insurance premiums. Hence, the VP of Astroscale can be deemed as radically novel with respect to the market in which it operates. Nowadays, Astroscale has subsidiaries in the United Kingdom, the United States, Israel, and Singapore since it gained global recognition creating a new market. In 2021, Astroscale successfully tested its technology, End of Life Service by Astroscale-demonstration (ELSA-d), demonstrating the ability to capture defunct spacecraft. ELSA-d consists of a satellite that acts as a chaser spacecraft with a docking capacity that permits anchoring non-functional spacecraft and deorbiting them. This has allowed Astroscale to start a cooperation with ESA and OneWeb, receiving a 16M\$ investment to perform a mission in 2024 with the goal of collecting multiple defunct satellites. Furthermore, Astroscale collaborates also with the Japan Aerospace Exploration Agency (JAXA), the UK Space Agency, and New Zealand's Ministry

of Business Innovation & Employment. Finally, Astroscale is the most funded Japanese space venture and, globally, the most funded venture in on-orbit services and logistics.

3.2. Data Collection

The data collection was performed by relying on data from multiple secondary sources (e.g., academic articles, books, conference presentations, newspapers, reports, and the websites of the companies¹). These data were triangulated to gain different perspectives, avoid bias, increase robustness, and improve the quality of the analysis (Eisenhardt, 1989; Yin, 2009). Particularly, the process of data collection followed a three-step strategy with specific research objectives.

The first step aimed to collect data and information that allowed me to have a preliminary knowledge of the case, reconstructing the VP and the collaborations established to exploit Astroscale's business opportunity. The data collection strategy proceeded by gathering descriptive information related to the mechanisms that the venture undertook to gain legitimacy and reduce the liability of newness. The last step of the data collection strategy consisted of tracking and highlighting the peculiar elements concerning Japanese tradition and culture. The aim was to delineate and define the RL related to the context in which Astroscale was embedded. The venture's website was the main data source, consulting news, press releases, and blog articles starting from the inception of the venture. In addition to the official website, I consulted the official Astroscale social pages (i.e., Facebook, Twitter, Instagram, LinkedIn, and YouTube) and retrieved interviews of the founder Nobu Okada, the president Miki Ito, and the COO Chris Blackerby. Those sources offer a comprehensive overview of Astroscale (e.g., the vision and the stakeholders and partners involved in the creation of value). Furthermore, there were used conference papers that

¹ The references used to collect data for the case are reported in the Appendix A1.

investigated the Astroscale case (e.g., Brettle et al., 2019; Weeden et al., 2019), business newspapers (e.g., Financial Times, CNBC, Bloomberg), space newspapers (e.g., SpaceNews, Space.Com), and space agencies' reports (e.g., ESA, JAXA). Finally, I searched for academic articles and books describing the culture and the historical business and industrial practices characterizing Japan. Through these data, this research framed the RL of Japan at the time in which Astroscale was founded.

3.3. Data Analysis

The data analysis process followed the insights from Eisenhardt and Graebner (2007) and Yin (2009), which allows the generalization of the cases and to picture how RL sustains the risks of lack of legitimacy and liability of newness in radically-INV's.

The data analysis strategy consisted of two steps to allow a coherent description of the phenomenon.

First, the case was analyzed to understand the mechanism and strategy of the ventures to overcome the lack of legitimacy and liability of newness. A narrative description of the mechanism used by Astroscale to gain legitimacy and reduce liability was used.

Second, this study defined how the ventures dealt with the risks and analyzed the elements that resonate with Japanese culture and tradition. In particular, it highlighted the elements that relate to the Japanese culture and tradition (i.e., environmental and collectivist culture, manga culture, space tradition, and industrial tradition), identifying those elements of the Japanese RL leveraged by Astroscale to gain legitimacy and reduce the liability of newness (Table A1 in the Appendix). The retrieved data were independently analyzed by each author and then reviewed in meetings to discuss potential misunderstandings and divergent views.

During the two steps, data coding was performed. The themes were identified from the research questions, the theory on legitimacy and liability of newness, and the analysis of the secondary data collected. There were extracted four themes that were used in the analysis of legitimacy, “cognitive legitimacy”, “sociopolitical legitimacy”, “manipulating”, and “storytelling” and three themes for the analysis of the liability of newness “resources”, “capabilities”, and “network”.

4. FINDINGS

4.1. Lack of Legitimacy

Astroscale introduced a radically new VP that consists of a series of on-orbit services, such as in situ space situational awareness, satellite life extension and end-of-life management, and active debris removal, to preserve satellites' operations and space sustainability and reduce costs and risks related to space debris. A radically innovative VP can be difficult to understand due to the novelty introduced since it requires stakeholders to familiarize with a radically new venture (Renko, 2013). This made it difficult for Astroscale to raise and collect investments. In presenting its VP, Astroscale highlights that its mission strongly focuses on the cleanliness and sustainability of the space. These elements of cleanliness and sustainability resonate with important aspects of Japanese culture which is strongly oriented to cleanness and shares the responsibility to stop littering. This has attracted several Japanese entrepreneurs who, moved by “deep faith” in the venture to tackle the problem of space debris, decided to fund the new venture. On the matter, the president of Astroscale, Miki Ito stated that “*Japan is more concerned with the issues of debris than other countries are*” (METI, 2015). This collectivist aspect of Japanese culture is further highlighted by the same Okada in an interview years later: “*Japanese people are loyal to the*

community where they belong. I mean, that might be in the village, that might be in the school, that might be in the company” (Romero, 2019). Even the COO, Chris Blackerby, during an interview in 2021, to a journalist asking if Japan is a suitable place to start a venture that aims for the sustainability of space because of its culture, stated: “You are completely right. I mean this idea of responsibility and cleanliness and cleaning up after yourself. You know we're all taught that as kids, but in Japan, it's maybe internalized a lot more and it's a really important issue and I think there's something to be said for fact that a company like this driving global opinion and direction in this issue is Japan-based and I think Japan should take pride in that. The fact that this is something where Japan is concerned about environmentalism both on the ground and on orbit” (Seek Sustainable Japan, 2021). Moreover, Japan has, in the last 50 years, witnessed a societal change that made them more environmentally friendly after suffering serious environmental issues.

A further distinctive cultural element of Japan also leveraged by Astroscale is manga, the typical Japanese comics. A painting of a famous cartoonist Matsumoto Leiji was hung on the wall of the Tokyo facility of the venture. The picture represents a train traveling from Earth to the Moon through space, pointing at the mission of Astroscale to ensure the safety of the spaceflights. Another manga that helped Astroscale to gain legitimacy is Space Brothers. Also, in this case, a special picture with the characters dressed in Astroscale suits is used to deliver the company’s message. Furthermore, Okada used Space Brothers’ blog to talk about the company and the technologies Astroscale was developing. Besides the cultural elements, Japan has a strong history in civil space operations, especially in the study of solutions for the space debris issue. In fact, in 1997 JAXA attempted for the first time a robotic rendezvous using a chaser and target satellites, and Mitsubishi Heavy Industries, a Japanese company, was selected by NASA and JAXA for the development of a machine or a tool to eliminate space debris. Nobu Okada, while explaining what pushed him to start a

space venture, described his meeting with the first Japanese astronaut Mohri Mamoru who gave him an inspiring handwritten note “*The challenge of space is waiting for you.*” This story was presented in Okada’s earlier pitches to attract investors and the attention of institutional actors. Finally, to further increase its legitimacy among the Japanese audience and communicate the importance of the venture’s vision, Astroscale partnered with Otsuka Pharmaceutical, which produces Pocari Sweat, a famous Japanese drink. In 2001, the drink flew to space on board of the International Space Station. The two companies worked together in the “Lunar Dream Capsule Project”, which consisted of the delivery of a capsule to the surface of the Moon with messages written by kids on their expectations of space.

The Japanese RL has played an important role in the first stages of legitimation, which is considered crucial in the whole legitimation process (Navis & Glynn, 2011). The company, in 2015 won a Japanese award called “Minna-no-Yume” (Everyone’s Dream), which rewards those companies that develop social innovation that further helped to increase its legitimacy to a larger extent. Astroscale was then able to raise a series B investment from Japanese institutions and private entrepreneurs, signing different agreements with other relevant Japanese companies. Meanwhile, Astroscale has started to manipulate the context in which they are embedded, by the mean of the Japanese culture. In fact, once a venture increases its legitimacy, it can influence the institutional context (Bergek et al., 2008). The importance to change some of the established standards and values of the space industry was highlighted in different talks made by the founder Okada, Astroscale President Ito, and COO Blackerby. One of the actions taken by Astroscale was to start an academy to diffuse the importance of space conservation for kids. The project, called “Space Sweepers Academy” refers to “Planetes”, a manga about a crew of space trash collectors that clean the space to ensure its sustainability. “Space Sweepers” is also the name that the company gives to its

employees. Okada in an interview revealed that the engineers working for its company are expected to read the manga.

Finally, Astroscale has kickstarted a boom in the Japanese Space Startup Market, bringing the number of space startups to increase from three to twenty after its foundation. Furthermore, following the legacy created by Astroscale, another Japanese startup, namely ALE, and two ventures, such as SKY Perfect JSAT and Sumitomo Forestry, are working on the sustainability of space. As a result, this created a new space ecosystem in Japan changing the space supply chain structure. In addition, Astroscale won, together with GITAI, a Japanese space startup, a government contract for the development of a robotic arm to be used in space operations. In conclusion, Astroscale's role in the Japanese Space sector has led the venture to gain sociopolitical legitimacy, thus appearing right and appropriate in the eyes of the whole country.

To address the global market, the venture decided to open an office in the UK's space hub and the US. Actually, once the new VP was locally validated in the Japanese context, its novelty may spread to new contexts bringing other actors to more easily accept it (Drori & Honig, 2013). While opening offices in other countries, Astroscale leveraged the Japanese RL to gain global legitimacy. In an interview, COO Blackerby stated that: "In NASA, people have come to recognize that this is one of the leading space venture companies in Japan, and even in the world, in terms of understanding the issue and bringing in the right" (Daimon, 2017). Thanks to Astroscale, Japan extended its environmentalism culture beyond the Earth, becoming the leading country in the fight for the sustainability of space

The above discussion highlights the RL provided elements that get Astroscale's stakeholders familiar with the novel VP and allowed the firm to start a process of manipulation of the environment. Accordingly, the following proposition is formulated:

Proposition 1. *The RL supports radically INVs in gaining legitimacy to increase their likelihood of survival.*

4.2. Liability of Newness

To overcome the liability of newness, radically-INVs need to retrieve the resources they lack and develop the capabilities necessary to compete effectively (Stinchcombe, 1965). From the beginning, Okada was searching for collaboration with Japanese firms and institutions. In an interview, he declared that he always thought that the Innovation Network Corporation of Japan (INCJ) would be a suitable investor for its company. The INCJ is a public-private partnership that involves the Ministry of Economy, Trade, and Industry of Japan and some of the major Japanese companies. In March 2016, INCJ funded Astroscale with US\$30 million during the series B investment, alongside other Japanese entrepreneurs. The investment made by INCJ in Astroscale has brought not only capital but also capabilities in the development of business models, know-how, and technological development. This was only one of the important partnerships that the company created. Related to the importance of the Japanese industries, the President of the venture, Miki Ito, stated that in Japan “*there are many companies which have superior technologies that are contributing to solving the issue*” and that Astroscale followed a flexible approach to cooperate with the companies owning the necessary technologies (METI, 2015 12). This kind of approach was helpful in the reduction of the overall liability of newness. In fact, Okada emphasized the importance of collaboration with laboratories, universities, and private companies. Among those, there were two mechatronics firms, such as Yuki Precision and OGS, belonging to one of the traditional Japanese industries, i.e., the robotics industry. Actually, Japan is recognized as 'The Robot Kingdom', due to its historical tradition in automation, in which Japan is

deemed as a world leader. These firms contribute to the survival and further development of the new venture by providing the relevant engineering capabilities and the necessary resources for the development of space debris detection satellites. In particular, Yuki Precision, a company with long-standing experience in precision machining, provided its competence in complex and precise machining of materials that are suitable for space. While, OSG supported the development of the first satellite manufactured by Astroscale – i.e., IDEA OSG-1 – by providing the proper tools for the manufacturing of the spacecraft's components. Another important collaboration came from Mitsubishi Heavy Industries, which enhanced Astroscale's technical aspects of space operations, thanks to Mitsubishi's knowledge of launch vehicle manufacturing and launches services capabilities. Important contributions came also from the civil space industry, both from firms and institutional actors. On the one hand, a firm such as ANA provided knowledge on operational safety. On the other hand, a collaboration with the University of Tokyo gave Astroscale the possibility to use Hodoyoshi-3, a satellite used in the FIRST Program of the Cabinet Office of Japan, as the base for the development of Astroscale technology.

Furthermore, the industrial tradition combined with the university specialization created the proper environment in which the new ventures could find a skilled workforce. For instance, Ito was one of the engineers working on the Hodoyoshi project and studied at the University of Tokyo. This university is known for its tradition in the space sector. In fact, the first Japanese satellite – Ohsumi – was developed in the Institute of Space and Aeronautical Science, at that time part of the University of Tokyo.

Finally, at the end of 2021, Astroscale received its Series F investments. Until the Series E investment, all the investors providing the necessary financial capital for the development of Astroscale technologies and business models were Japan-based. The shared culture played a paramount role in the decision of Japanese investors to fund Astroscale.

Therefore, recurring to the RL allowed Astroscale to access and source the necessary resources, capabilities, and human and financial capital to survive in the aftermath of its creation. Hence, the following proposition is formulated:

Proposition 2. *The RL supports radically INVs in reducing the liability to increase their likelihood of survival.*

5. DISCUSSION AND CONCLUSION

This work focuses on radically-INVs, investigating how they can overcome the so-called “death valley”, period that characterizes new ventures in the journey to become a viable business (Ritter & Pedersen, 2022). In particular, the research discusses how the regional context supports a radically-INV while facing the risks that threaten their survival, such as the lack of legitimacy and the liability of newness. What emerged is that the RL, defined by the regional business and industrial practices and culture (Aoyama, 2009), has a role in the mitigation of the risks faced by the INVs, and in particular for those INVs that present the highest degrees of novelty. To explore the phenomenon in detail, I perform a single case study of a radically-INV on Astroscale, a Japanese venture that pioneered the on-orbit service market by introducing a radically new VP. This research started by analyzing how the Japanese RL was leveraged by Astroscale in the mechanisms necessary to gain legitimacy. Firstly, radically-INVs can benefit from regional cultural and traditional elements that facilitate the understanding of the VP by stakeholders. In addition, aspects of the regional culture and tradition can be used as symbolic elements that provoke a sense of familiarity in the stakeholders (Bitektine, 2011; Lounsbury & Glynn, 2001). Secondly, in order to manipulate the environment, a new venture must avoid contrast with the extant

practices and values (Suchman, 1995). Therefore, the compliance with the RL and its exploitation can become a strategy that radically-INV can pursue to gain legitimacy and subsequently act on the institutions and conversely influence the context. In this way, the radically-INV does not contradict the status quo, but leverages the local cultural elements and tradition to start shaping the RL, adding new distinctive elements. Thirdly, to extend its legitimacy beyond the local environment, a radically-INV can carry the RL in other contexts (Aoyama, 2009) leveraging also the new aspects it added to the RL. In the specific case of Astroscale, Japanese traditional elements such as the culture of cleanliness, the diffusion of manga, and the strong industrial tradition in robotics and electronics have allowed the venture to easily communicate its VP. Afterward, it was identified how the RL supports the radically-INV in reducing the liability of newness. The shared culture within a region favors information flows (Roundy & Fayard, 2019; Sweeney, 1991) allowing the connection of different actors in it (Laursen et al., 2012). This creates a collaborative climate that allows the radically-INV to access relevant resources. In this way, the RL also facilitates the formation of alliances and networks, that may provide further resources that help to cope with the liability of newness. This study showed how Japan represented a proper context for Astroscale to survive since Astroscale could leverage the peculiarities of the Japanese RL to gain legitimacy and reduce the risks due to the liability of newness.

5.1. Theoretical Contributions

Extending the knowledge about the elements that may increase the likelihood of survival of radically-INV is paramount for the entrepreneurial literature. First of all, following the lineage of study that considers the context as relevant and important to INV (Aoyama, 2009; Autio et al., 2014), this study investigated the role of the RL in supporting radically-INV in facing the risks related to the lack of legitimacy and liability of newness.

Scholars have investigated how the regional context surrounding the new ventures can influence their creation (Fritsch & Falck, 2007), the identification of new opportunities (Messeni Petruzzelli et al., 2020), the entrepreneurial intention (Donaldson et al., 2021; Huggins & Thompson, 2016; Wigren-Kristoferson et al., 2022), and the actions to exploit the business idea (Hayton & Cacciotti, 2013). This work contributes by identifying the role of the RL in the business strategy and in the mechanisms deployed by radically-INV's to reduce the risks they face. Consequently, this work offers theoretical contributions not only to the entrepreneurship literature but also to the regional studies literature that investigates the role of regional characteristics in sustaining the survival of radically-INV's (Aoyama, 2009; Fritsch & Wyrwich, 2018). The research shed light on how the RL may support radically-INV's in reducing the negative effects of both the lack of legitimacy and the liability of newness. It highlighted how the culture, historical business, and industrial practices of a region can have a crucial role in the economic development of a region, being supporting elements for radically-INV's in facing risks during their early infancy.

Secondly, this work contributes to the entrepreneurship literature by investigating the mechanisms and strategies that firms can adopt to gain legitimacy (Kuratko et al., 2017; Navis & Glynn, 2011; Zimmerman & Zeitz, 2002). In particular, it analyzes how the culture and tradition of a region can be used to support the manipulation and narrative strategies to gain legitimacy. The literature has suggested the importance of the manipulation strategy (Zimmerman & Zeitz, 2002) and when to use such a strategy (Kuratko et al., 2017). This work adds elements that explain how this strategy can be performed, making use of elements of RL as a reference to the status quo, thus avoiding contrasts with the context.

Thirdly, the concept of liability of newness was introduced by Stinchcombe in 1965. The importance of this topic is still central to the entrepreneurship literature that is looking for strategies and mechanisms to overcome the liability (Soto-Simeone et al., 2020). This

work further increases the understanding of the mechanisms and dynamics allowing radically-INV to overcome the liability of newness.

Fourth, the role of culture in the literature of entrepreneurship lacks proper attention (Lounsbury & Glynn, 2001). Following the call for further study on the culture in entrepreneurship and innovation made by Cornelissen et al. (2017), this study advances the understanding of how culture, in the form of RL, can contribute to the survival of radically-INV.

Finally, this work, by focusing on the radically-INV, increases the understanding of the dynamics behind the survival of these specific ventures. Entrepreneurship literature has considered INVs as a single typology of firms (Cliff et al., 2006; Koellinger, 2008), without proposing a distinction of the broad group of INVs according to their characteristics. This study, focuses on a specific typology of INVs, namely radically-INV, highlighting the specific features and dynamics that characterized them (Samuelsson & Davidsson, 2009).

5.2. Practical Contributions

From a practical point of view, the findings can be beneficial to entrepreneurs, and policymakers since they show how some of the characteristics of the context may facilitate the survival of radically-INV in a specific region. In particular, entrepreneurs who aim to create a radically-INV can scan the environment to identify and leverage elements of culture and tradition that are in line with the opportunity that the radically-INV aims to explore or can decide to start their venture in a geographical area that presents such elements. As a consequence, the radically-INV do not only gain legitimacy, thus increasing their likelihood of success, but also facilitate the understanding by important stakeholders of the value they created. Furthermore, the establishment of a radically-INV in a favorable environment can

facilitate the identification and gathering of the relevant resources. Once the radically-INV gains legitimacy from their proximate stakeholders, they can spread their offering outside the region, carrying the RL, thus gaining legitimacy also in different regional contexts. Finally, policymakers may profit from a strong RL, since it favors the survival of radically-INV, which lead to economic growth and development. In fact, they can focus their effort on sustaining the business and industrial tradition, nurturing the RL on which radically-INV can rely to increase their likelihood of survival.

5.3. Limitation and Further Development

The study has, of course, some limitations. In particular, the methodology used is a single case study in a specific region. Indeed, an interesting way to further explore the role of RL is to use additional case studies coming from different regions and sectors, in order to investigate the contingency factors that influence the findings of this paper. Furthermore, the analysis was based on qualitative data; running an extensive quantitative analysis could help further test and verify the results.

The study opens several avenues for further research to explore the role of the RL in the survival and emergence of radically-INV. For instance, future works can investigate how RL can support the identification of new entrepreneurial opportunities or how the elements of the RL imprint the founding teams. Studies could also focus on how INV, in turn, influence the evolution of the RL and the subsequent generation of entrepreneurs. Furthermore, future studies may investigate if there are differences in how expat-preneurs [i.e., those who temporarily live abroad and initiate a new venture opportunity in the host country (Vance et al., 2016)], or immigrant entrepreneurs (i.e., those who, pushed by economic and socio-political reasons, move from their home country on a permanent basis

and start a new business in the host country (Omorede & Axelsson, 2022) leverage RL compared with native entrepreneurs. Finally, scholars may investigate how the bundle of the resources of a region can influence the location decision of entrepreneurs to start a new venture, and in particular the role of RL in this decision.

CHAPTER. 2 ENTREPRENEURIAL RECYCLING IN THE AFTERMATH OF ANCHOR FIRMS' CRISIS

1. INTRODUCTION

A firm facing a crisis may experience financial instability and operational disruptions, which can lead to a reduction in revenue, layoffs, and, in some cases, closure. The consequences of crises extend throughout the regional environment, leading to an increment in the unemployment rate (Jofre-Monseny et al., 2017), a reduction in the incentives to local supply and demand, and the depreciation of knowledge (Hoetker & Agarwal, 2007). These negative effects are magnified when the crisis hits an anchor firm, defined as a large firm that catalyzes regional innovation development (Agrawal & Cockburn, 2003). In fact, knowledge created by an anchor firm is deemed to be at the base of regional development (Agrawal & Cockburn, 2003), which stimulates regional industrial R&D as well as local universities in developing knowledge useful for the supply and demand sides of the anchor firm's markets (Agrawal & Cockburn, 2003). This knowledge is the result of the employees' knowledge operating under firm specific routines (Nelson, 1985). Therefore, those individuals store both tacit and explicit knowledge (Grant, 1996) and can trigger mechanisms for the diffusion and development of knowledge within a region through their formal and informal contacts (Dahl & Pedersen, 2004), mobility, and by spilling over for creating new ventures (Agrawal et al., 2010; Caiazza et al., 2020; Owen-Smith & Powell, 2004; Qian & Acs, 2013). However, due to an anchor firm crisis, individuals may be unemployed for a long time (Blanchard & Katz, 1992), hired by firms in different industries (Hoetker & Agarwal, 2007), or move to different locations (Hansen et al., 2021), thus they may not be able to use the knowledge acquired. As a consequence, the valuable knowledge of the anchor firm can be lost.

To reduce the negative impacts of firms' crisis is important to keep the flow of knowledge and resources (i.e., skilled workers, capital, intellectual properties, and infrastructures) released by the anchor firm, into the region (Mason & Harrison, 2006; Sorenson, 2017; Spigel & Vinodrai, 2021). Among all, human resources are deemed to be the most valuable to be recycled into the ecosystem since they embed the tacit knowledge, skills, and capabilities developed during their employment in the anchor firm (Spigel & Vinodrai, 2021). Furthermore, human resources exert agency, namely the capacity of individuals to make purposeful choices and take actions that lead to tangible results (Grillitsch & Sotarauta, 2020).

Scholars examining the crises and closure of anchor firms have focused on the attributes of the workforce, with the aim of comprehending the factors influencing their decision to embark on an entrepreneurial career (Nyström, 2020; Spigel & Vinodrai, 2021). Those studies found that in the aftermath of the crisis of anchor firms, aged and experienced individuals are more likely to start a new venture (Spigel & Vinodrai, 2021), since they might hold autonomous positions and leverage their social network to create a new venture (Nyström, 2020). Those studies, however, did not offer insights into how human resources leveraged their specific knowledge to create a new venture in the downturn of an anchor firm. As a consequence, there is a lack of understanding of how human resources and their knowledge are recycled within an ecosystem (Spigel & Vinodrai, 2021). Accordingly, this study addresses the question of *“How does the knowledge gained in an anchor firm help individuals to create new ventures in the aftermath of the crisis of an anchor firm?”*. Answering this question is critical to understand how individuals may preserve crucial knowledge at risks due to anchor firms' crises, while shedding light on the dynamic of new venture creation. This phenomenon gains even greater significance since new ventures, being

sources of economic growth and regional development (Xu et al., 2021) might balance the negative socio-economic consequences that ensue from the closure of big firms.

To address the research question identified, I performed a qualitative study collecting data through interviews. This methodology is considered valuable in understanding the diversity of life experiences and circumstances (Beer et al., 2019). The interviewees were former employees of Olivetti, an anchor firm headquartered in the Piedmont region (Italy). The firm experienced a crisis in the late 90s which led to a downsizing of its operation, followed by a new period of growth and a subsequent crisis that led to further downsizing. The data collected and analyzed supported the definition of a framework describing how different typologies of knowledge acquired by individuals in their work experience can be effectively reused in the creation of a new venture.

This work contributes to several streams within the entrepreneurship literature. It describes how the knowledge of individuals, developed during their experience in the anchor firm, is leveraged during the new venture creation process, hence increasing our understanding of the dynamics of this process (Davidsson & Gruenhagen, 2021). Furthermore, this study, by investigating the transition of individuals from employment to entrepreneurship as a consequence of the crisis of an anchor firm, provides insights into the dynamics of resource recycling within an entrepreneurial ecosystem that can ensure its resilience (Sorenson, 2017; Spigel & Vinodrai, 2021).

2. THEORETICAL BACKGROUND

The goal of this work is to understand how individuals leverage the knowledge they developed in the anchor firm when creating new ventures in the aftermath of the anchor firm's crisis. Accordingly, I, firstly, describe how the anchor firms shape human resources,

and how a crisis can influence the knowledge developed. Afterward, I illustrate the knowledge necessary for an entrepreneurial career. Finally, I present the process of creating a new venture.

2.1. Anchor Firms and Human Resources

An anchor firm can influence human resources in different ways. First, anchor firms offer high salaries and stability that attract the most qualified workers (Spigel & Vinodrai, 2021). In this way, highly skilled people are brought together in the anchor firm and they create internal networks that allow for confrontation and exchange, further increasing their human capital (Galor & Tsiddon, 1997). Those networks can last beyond the closure of an anchor firm (Bahrami & Evans, 1995). Secondly, anchor firms invest in the training of employees, providing them with superior technological and managerial knowledge (Spigel & Vinodrai, 2021). Finally, the high investment in R&D, typical of anchor firms (Agrawal & Cockburn, 2003), increases the human capital of employees by equipping them with novel and improved skills, knowledge, experience, and expertise (Becker, 1964).

The human resources of an anchor firm can enact mechanisms that allow the diffusion of knowledge (Acs et al., 2009; Owen-Smith & Powell, 2004; Qian & Acs, 2013). This can be the result of individuals' formal and informal contacts with individuals who are not employees of the anchor firm, hence allowing the exchange of knowledge within the region (Balland et al., 2016; Dahl & Pedersen, 2004). Furthermore, individuals might spill out knowledge developed in the anchor firms that is not exploited (Audretsch et al., 2009; Caiazza et al., 2020). In this way, the knowledge created by an anchor firm flows in the region, serving as a base for the creation of new knowledge within the region itself, consequently shaping regional growth (Agrawal & Cockburn, 2003; Sorenson, 2017).

When an anchor firm faces a crisis, the diffusion of knowledge is hindered for manifold reasons (Hoetker & Agarwal, 2007), leading to the loss or depreciation of knowledge. In particular, firstly, anchor firms can produce new knowledge with cost efficiencies. This advantage stems from their capacity to implement economies of scale through the use of skilled workers and equipped facilities over multiple research projects, allowing them to not only reduce costs but also enhance the quality of knowledge creation (Agrawal & Cockburn, 2003). As a consequence of the crisis, R&D investments are lower or none, slowing down the creation and diffusion of new knowledge in a region. Secondly, the knowledge is intrinsic to individuals but requires specific routines and organizations (Nelson, 1985). If an anchor firm closes, it cannot act “as a template” for those who seek to build on the anchor firm’s knowledge (Hoetker & Agarwal, 2007), thus limiting the ability to replicate and develop the knowledge. Finally, when employees leave the anchor firm, they may be unemployed for a long time or be working in firms with different routines that do not help individuals to fully exploit their knowledge (Hoetker & Agarwal, 2007).

The diffusion of knowledge within a region is critical for regional development (Asheim, 1996; Owen-Smith & Powell, 2004), since it allows other actors, local R&D and universities, to build on such knowledge, making it important to understand the mechanisms of diffusion of knowledge in the aftermath of an anchor firm’s crisis. Spigel and Vinodrai (2021) argued that the basis of the capacity of a region to recover lies in how human resources are recycled into the entrepreneurial ecosystem. Despite acknowledging the pressing issue of how individuals, in an area of crisis, create new ventures (Beer et al., 2019; MacKinnon, 2017), there is a scant understanding of how human resources, endowed with valuable experience and knowledge, are recycled into the entrepreneurial ecosystem for creating new ventures (Nyström, 2020; Spigel & Vinodrai, 2021).

2.2. Entrepreneurship and Human Capital

Individuals can decide to start a new venture to capitalize on the knowledge and expertise they developed through their former jobs by creating a new venture. As a consequence of an anchor firm crisis, individuals are more likely to engage in entrepreneurial activities (Nyström, 2020). This is because they face lower opportunity costs resulting from the unstable financial situation of their former employment (Nyström, 2020). Market, management, and R&D experience have been positively related to entrepreneurial performance (Marvel, 2013), in terms of survival (Bates, 1990; Cooper et al., 1994), technology growth (Colombo & Grilli, 2005), and the initial firm size (Colombo et al., 2004). Furthermore, the extent of knowledge owned by entrepreneurs influences the entrepreneurial process (Dencker et al., 2021), since it plays a major role in the generation and exploitation of entrepreneurial opportunities (Marvel, 2013), and in the acquisition, bundling, and leveraging of resources (Dencker et al., 2021). This knowledge is instrumental in assessing the relevance of the resources necessary for the new venture and to utilize them in the activities required for the creation process. Finally, individuals who worked in anchor firms tend to have better financial performance with the new ventures due to the extensive networks they have cultivated during their tenure in anchor firms. These networks support the new venture to foster legitimacy and access to valuable resources, industry insights, and strategic partnerships necessary for the creation process (Frederiksen et al., 2016). Therefore, the knowledge acquired by individuals during their former employment is an early source of competitive advantage (Spigel & Vinodrai, 2021) that may affect the success of the new venture. However, not all individuals within an anchor firm own the same knowledge, as the knowledge they acquire can diverge, influenced by their specific roles and responsibilities within the organization (Hoetker & Agarwal, 2007).

In the Knowledge Spillover Theory of Entrepreneurship, authors have argued that both technological knowledge and business knowledge are instrumental to the creation of new ventures (Acs et al., 2013; Qian & Acs, 2013). Technological knowledge is at the basis of technical development, and it provides individuals with the tools to understand and create innovation (Acs et al., 2009; Qian & Acs, 2013). This knowledge is regarded as the key competitive factor for the new venture's success since it may be difficult to imitate (Balland et al., 2016). Anchor firms, with their technological knowledge, create externalities that are exploited by other firms in the region to innovate, increasing the overall regional innovation (Feldman, 2003).

On the other hand, business knowledge encompasses all the non-technological knowledge that comprises expertise in managing and coordinating organizations, as well as information about customers, markets, suppliers, and competitors (Huber, 2013). This knowledge can be operationalized in the market (Qian & Acs, 2013) and managerial knowledge (Audretsch et al., 2009). Market knowledge refers to knowledge about product and service commercialization, customer problems and needs, and about suppliers and competitors (Marvel, 2013). Anchor firms are situated in larger markets, which provides individuals with access to a broader spectrum of information from various markets that might not be accessible to everyone (Agrawal & Cockburn, 2003). Finally, managerial knowledge refers to structuring, bundling, and leveraging the necessary resources to run a business (Audretsch et al., 2009), on the formal and informal level (Kogut & Zander, 1992). Within anchor firms, having managerial positions allows employees to develop and refine managerial knowledge through the coordination of projects and employees on a large scale. This provides individuals with leadership ability (Audretsch et al., 2009) which elevates the individual's reputation, an element that can be instrumental for the creation of new ventures (Nyström, 2020).

2.3. New Venture Creation Process

To understand how individuals leverage the knowledge gained during their experience in the anchor firm, it is important to dig deeper into the different phases of the venture creation process and the different activities carried out. The creation process of a new venture consists of three phases, namely generation, discovery, and exploitation (Davidsson & Gruenhagen, 2021).

In the generation phase, individuals come up with a business idea that comprises one or more attributes such as unmet market needs, a market target, a technology or knowledge to commercialize, or a combination of these elements (Vogel, 2017). Starting from those elements the individuals perform market research to understand the potential of their ideas (Marcon & Ribeiro, 2021).

In the development phase, the entrepreneurs perform an iterative process of experimentation and assessment (Vogel, 2017) in which they test the overall viability of the new venture (Marcon & Ribeiro, 2021). This allows to clarify additional elements of the business such as a value proposition, revenues, cost structure, customer segments, and distribution channel (Vogel, 2017), and to identify the necessary resources for the creation of the new ventures (Marcon & Ribeiro, 2021).

In the exploitation phase, the entrepreneurs need to increase sales and their market share and stability (Paschen, 2017). Therefore, it requires the implementation of activities that aim at creating a strong customer base, entering and expanding the presence in the market, and extending the organizational structure (Picken, 2017), while also improving the offer (Marcon & Ribeiro, 2021).

During the different phases, entrepreneurs undertake different activities, which, as a consequence, require different inputs. In this way, entrepreneurs leverage the knowledge

they own according to the phase. Understanding how knowledge is used represents an important issue both for academics and practitioners (Beer et al., 2019; MacKinnon, 2017) due to the importance of critical knowledge that through entrepreneurship can be recycled within the region in the aftermath of an anchor firm crisis.

3. METHODOLOGY

The study adopts a qualitative approach for manifold reasons. Qualitative studies are particularly suitable for describing complex and dynamic phenomena (Eisenhardt & Graebner, 2007) such as the creation of new ventures following an anchor firm crisis. Furthermore, the qualitative approach, particularly through multiple case studies, is effective for answering research questions aiming to capture the elements that govern the investigated phenomenon and explain “how” it evolves (Yin, 2009). In addition, the collection of primary data through interviews provides a valuable means to grasp the experiences and circumstances that are essential for understanding labor dynamics (Beer et al., 2019). Finally, studies that employ qualitative techniques have the potential to offer insights into issues that interest both academics and practitioners (Prasad & Prasad, 2002).

3.1. Setting

The aim of this study is to build a theory on the use of the knowledge creation of a new venture in the aftermath of an anchor firm’s crisis. To address this issue, I conducted a study on individuals who have worked for Olivetti. Olivetti represents a suitable context for this study since, before the crises faced, it was an anchor firm influencing the innovation development of the north of Italy. In particular, Olivetti was founded in 1908 in the Italian city of Ivrea located in the Piedmont region as a typewriter manufacturer company. Through the years, Olivetti expanded its production to electronic devices, such as calculators and

computers as well as in the creation of software, gaining international market share in Europe, the US, Asia and Middle-East. The company, through its investments in research and development, became a pioneer in the various domains it operated (e.g., typewriter, information system, printers, and office equipment). For instance, in the information system industry, it actively generated knowledge that led to the creation of cutting-edge technologies and products such as, for example, the ELEA 9001, the first mainframe computer using transistors, and the P101, a desktop programmable calculator. Those products drove Olivetti's growth, making the company one of the biggest producers of office equipment and with the highest sales of personal computers in various markets. Throughout history, Olivetti was considered a progressive firm due to its significant innovative capacity, organizational models emphasizing efficient collaboration and knowledge sharing, and its strong focus on both customers satisfaction and employee well-being. Moreover, the company nurtured the regional ecosystem through partnerships, spin-offs, and acquisitions that further pushed Olivetti's influence in the area. In the first years of 1990, the change of paradigm in the computer industry led to the company facing a major crisis, causing downsize in Olivetti operations and to the sale of the computer division. To recover from this crisis, the company was acquired by Telecom Italia and changed the focus from computers to telecommunications. This led to a short period of growth followed by a new period of crisis. Nowadays, Olivetti is still active but has never achieved the same results but its legacy in the Ivrea area is still strong and exemplified by Ivrea's inclusion in UNESCO's list of world heritage sites as Industrial City of the 20th Century.

3.2. Data Sampling

Current census data and administrative records do not provide relevant details to determine the career paths of former Olivetti employees. The shortage of data pertaining to

workers' mobility and their transition to entrepreneurship stands as a major obstacle in the entrepreneurial literature (Spigel & Vinodrai, 2021). In response to these challenges, career-based social media platforms such as LinkedIn are increasingly popular ways of selecting and collecting data on the individual level (Chen & Thompson, 2016; Jiang et al., 2018; Spigel & Vinodrai, 2021). LinkedIn can count on more than 950 million members who provide detailed information on job histories such as their education, job location, job duties, and dates of employment uploaded by users. Furthermore, LinkedIn allows the creation of thematic groups as well as alumni groups of schools, universities, companies, and organizations. Accordingly, to identify a pool of former Olivetti employees, I used the keyword "Olivetti" in the past company field which yielded 8,400 results, as well as in the group sections identifying two Olivetti alumni groups called "Olivettiani" and "Olivetti Alumni". For each of the 8,400 profiles resulting from the queries, I navigated the personal page and checked if their work experiences present any position as "Founder", "Co-Founders", "President", "CEO" or their Italian translations and eliminated those individuals that have moved to different regions. In this way, I can identify only those individuals who have started a new venture and kept the knowledge acquired at Olivetti in the same region. The sample was then reduced to 130 individuals to whom a connection request with a message presenting the scope of the research was sent. Among those who responded to the connection request, only 10 accepted to take part in the interview. Table 1 presents the positions that those individuals hold in Olivetti and describes their entrepreneurial activities.

Case	Olivetti Position	New Entrepreneurial Activity
Case A	Sales, training specialist, local marketing, PC retail network director	International Trade, Management & Consulting
Case B	IT Specialist, Senior Financial Director	Financial and Management Consulting
Case C	Program Manager for Automation	Development of applications in the field of Manufacturing Execution Systems
Case D	Sales, Sales Director	Business Development and M&A Advisory
Case E	Production Manager, Buyer, Editor Senior	Marketing, Communication, and Event Planner Consulting
Case F	Sales Director, Product Manager	Management Consulting
Case G	Project Manager, Product Manager, Program Manager, Business Development Manager, Sales and Marketing	Innovation & Technology Management Consulting
Case H	Credit Manager	Business Consulting
Case I	Bid & Service Manager, Technical Assistance Manager	IT Services and IT Consulting
Case L	Quality Assurance Manager, Field Service Director, Technical Service Director	Service management and Quality Consulting

Table 1. Sample Lists

3.3. Data Collection

The process of data collection relies on primary data gathered through semi-structured interviews with the individuals identified in the data sample phase. The interviews were conducted either face-to-face, online using video conferencing software (i.e., Zoom, Microsoft Teams, and Google Meet), or through phone calls. The interviews lasted between 30 and 60 minutes and were recorded for transcription purposes. During those interviews, participants were asked to describe their careers, giving more details on their experience in Olivetti and the new venture creation process. The goal of the interviews was to gather information on how the work experience in the anchor firm and how the knowledge acquired shapes the creation process of the new ventures. In addition to those interviews, secondary data were collected to gain more insight into the cases and triangulate information to minimize bias and achieve robustness (Eisenhardt, 1989; Yin, 2009).

3.4. Data Analysis

The data analysis approach involves three stages: preliminary analysis, content analysis, and processing and understanding the data to provide a cohesive account of the phenomenon (Bardin, 1977). During the first phase, I revised the interviews' transcriptions and notes taken during the interview to outline a case report for each individual in the sample. In this way, I ensured that I had all the information necessary for the research. In the content analysis phase, I clustered the experiences of the interviewees as providing them with managerial, market and technological knowledge. At the same time, I classified the different activities undertaken for the creation of the new venture in relation with the generation, development, and exploitation phases. Afterward, I identified the typology of knowledge exploited during each phase of the new venture creation. Finally, I compared the various cases using cross-analysis to identify shared elements and differences. This process facilitated the definition of findings.

4. RESULTS

4.1. Generation

The generation phase defines the starting point of the entrepreneurial process, and it is enacted by the individual agency to begin an entrepreneurial career (Vogel, 2017). While describing their experiences at Olivetti, the interviewees highlighted the significant investments in research on automation systems that influenced the products, services, and internal organization of Olivetti. As reported by case C: *"Since I have started my experience in Olivetti, I have been working on the automation system. I was lucky to operate in that field as a simple operator, as well as managing projects. This has sparked a passion in me that I brought into my entrepreneurial activity"*. Case I, similarly, reported that while working for Olivetti he had the chance to work with a technology that imprinted his entrepreneurial

career. In both cases, technological knowledge became the core of their business ideas, though applied to different industries from that of Olivetti. For instance, case I decided to exploit the technological knowledge developed in Olivetti in an emerging industry, motivated also by the innovative culture of Olivetti and later in more traditional industries. Furthermore, the crisis of Olivetti pushed cases C and I to start the new venture as they no longer felt constrained by the company. On the matter, case I said: *“I always thought I would be an entrepreneur, I always wanted to have something that was mine. When I saw that Olivetti was not doing well, I thought it was the right moment to start a new venture”*.

Olivetti marketed products in several geographical areas (e.g., Asia, Middle East, Europe, and the US) and domains (e.g., public administration, banking, retail). Hence, it was likely that employees within Olivetti could develop market knowledge allowing them to access information about distant markets. For instance, four of the cases in the sample reported that, due to their market knowledge, they were informed about potential customer segments and their needs. Those individuals decided to leverage their managerial expertise (e.g., credit management, quality management, assistance, and project management), addressing the same geographical market they operated while in Olivetti, but also exploring different market domains to start the new venture. For example, case A worked closely with several markets in Asia and developed a deep understanding of the Chinese market which led to the decision to start a company on international trade: *“I knew how to work with Chinese, and I knew what they like: ‘Luxury’. In Italy, we have a lot of artisans and small and big companies that create high quality goods. So, I decided to go to some fair in China and see what happens”*. Case G, on the other hand, after leaving Olivetti, was informed about customers that might need his expertise and therefore he started a small consultancy agency: *“The crisis was there and I was not happy: So I had just left Olivetti, and I was still deciding what to do when a former client in Olivetti reached me to talk about a firm that was looking*

for organizational advice. I thought about it, and I saw an opportunity to begin a career as autonomous [worker] and provide consultancy". Market knowledge not only aided in identifying customer segments and needs but also facilitated the validation of the idea through discussions with market experts to identify a segment to target, as in the case of case I. Indeed, the entrepreneur of the case I was very knowledgeable of the public administration market due to his period in Olivetti and reported: *"I know people in that market, and I talked with them about my idea to get insights and I had positive vibes"*. A particular situation was represented by case B, who decided to not leverage his market knowledge to avoid contrasts with the management team of Olivetti.

As previously reported, managerial knowledge was leveraged by entrepreneurs to create a new venture that would offer their expertise as a service. Case L during the interview said: *"The situation was not nice, I would have never left Olivetti, but the situation pushed me to do so. I left Olivetti and I wasn't scared. I was aware of what I learned during my time in Olivetti. I created the company sure that soon after I would find customers. And it happened"*. Similarly, case F was approached by an acquaintance who proposed to put the managerial knowledge developed in Olivetti at the core of a business idea, while also leveraging the reputation earned by being employed in Olivetti.

4.2. Development

The development phase comprises an iterative process of experimentation and evaluation that helps to further determine elements of the business. Case I, describing the experience of creating the new venture: *"I had a lot of experience with automation systems, so I knew what it takes to create the service I wanted to sell. [...]. In the last [entrepreneurial experience], I just applied my expertise, being pragmatic. While in the first one, I wanted to integrate my knowledge with new knowledge. In this project, I involved new people who had*

different knowledge to create the service". Similarly, case C: *"The easy part was to recreate all the conditions for the technology to work"*. From those cases, it emerged how technological knowledge helps the entrepreneurs to identify elements necessary for the value proposition to be created, defining key relationships, and activities necessary.

Market knowledge allows entrepreneurs to confront the market and to test the business opportunity as reported by case D: *"In Olivetti, I started to grow my network. [...] When I started my venture, people in my network were still operating in the same market, and I could just call them if there was a problem and find a solution together"*. In a similar vein, case A while doing the first fairs in China had customers helping to refine the business opportunity: *"I traveled a lot of times in China during my period in Olivetti and I learned how to work with Chinese. During the fairs, people were coming to me asking about clothes and fashion goods, and I thought it would be better to focus only on those products"*. Being aware of the market domain in which they want to operate allows the new venture to interact with customers who might provide feedback useful to develop and test the entrepreneurs' insight.

In this phase, managerial knowledge, especially related to the coordination of personnel, was exploited for the creation process. The experience in Olivetti made those individuals deal with big projects and large groups. As reported in several interviews, they felt quite confident in identifying skilled employees and the necessary resources and activities to run their business. In particular, case H said: *"I knew what it takes to operate, for me it was like a receipt, so I had just to pick the right ingredients."* Case I, stressed how important was the experience in managing projects for Olivetti: *"I managed a lot of groups, and I gained such an experience that I immediately understand if a person is the proper one for working in my firm"*. Managerial knowledge proved pivotal in the development phase as

it helps to shape business key resources and activities as well as the costs and revenue stream necessary for the business.

4.3. Exploitation

In the exploitation phase, the new ventures aim to increase their sale and their market share to reach stability (Vogel, 2017).

The interviews highlighted that technological knowledge allows entrepreneurs to diversify their offerings. As suggested by case I: *“We tried to create a product that is at the same time standard and flexible. We create a solution that is easily applicable to different domains while keeping the whole structure intact”*. Similarly, case C stated: *“From Olivetti, together with my passion for automation, I brought this idea to engage with different fields. In this way, we can satisfy more customers and reach new sectors”*. Accordingly, technological knowledge supports new ventures to diversify their portfolio and increase their market share.

All the cases in the samples emphasize the way Olivetti operated in the market, and how this shaped their idea on how to approach the market. For example, case A: *“I have very good memories about my period in sales in Olivetti. The company taught us that was important to listen to the clients and to visit them just for a talk. We didn’t have only to sell, but create also a personal connection, so we could understand what they need and how to give it to them. And this is something that I do also now, and I can see the results”*. Similarly, case I: *“In Olivetti there was this huge attention on humans, being them the employees or customers. It totally changed my mind and I’ve learned to operate following those schemes”*. The new ventures could rely on this knowledge to consolidate the relationship with customers, which, as a consequence, allowed for a consolidation and an increase in the market share. Furthermore, a deep knowledge of a specific market domain was reported as

useful to expand their market. Case D explained that: *“People knew who I was since my experience in Olivetti, and they were hearing what I was doing. For me it was easy to go to them and start to sell my services, and with some of them I didn’t have to compete with Olivetti, since they ceased to operate in such a domain”*. Leveraging the market knowledge helps the new venture connect with more customers.

Managerial knowledge developed in Olivetti allowed individuals to deal with and coordinate high numbers of resources and projects, which was reported to be very helpful in scaling new venture operations by effectively expanding the firm size. As reported by case H: *“Once we overcome the critical point, I contact a job agency to give them an exact list of the type of skills I wanted for my collaborators”*. The managerial knowledge in this phase helped the new ventures to identify the personnel necessary to increase the firm’s size and consequently, the operations. Case H further added: *“Human resources are the most important resources for the success of our firm. When the new people started working for us, I reduced my time on the field and started to coordinate those resources”*. On the contrary, case C admitted: *“My managerial expertise was poor. Yes, I had a managerial position, but they were not enough to scale the size of our firm. Luckily, one of the founding members had long experience and made things work”*. Managerial knowledge emerged as critical in coordinating the resources necessary to increase the size and operation of the new venture in the exploitation phase.

5. DISCUSSION AND CONCLUSION

In this chapter, I aimed at understanding how the knowledge developed by individuals during their working experience in an anchor firm is leveraged to create a new venture in the aftermath of the anchor firm crisis. Specifically, I provide a framework reported in Table 2

that describes how different types of knowledge that individuals acquire within anchor firms (i.e., technological, market, and managerial) are used in the different phases of the venture creation process (i.e., generation, development, and exploitation).

	Generation	Development	Exploitation
Technological	Core of the Business Idea	Identification of key relationships and activities	Portfolio diversification
Market	Identification of Market Segments and Needs	Identification of customers for testing the value proposition	Consolidation of market relationship and identification of new customers
Managerial	Core of the Business Idea	Identification of key resources, activities, cost structure and revenues	Coordination of resources to increase size

Table 2. Knowledge Utilization in Venture Creation Phases

Working at Olivetti exposed individuals to unique knowledge due to Olivetti's position at the forefront of technology, its global market presence spanning various domains, and its well-established organizational structure. With the crisis that severely impacted the firm in the early 1990s and the subsequent downturn in the 2010s, human resources were released into the environment bringing with them critical knowledge. For some individuals, this event triggered the decision to start a new venture as the opportunity costs associated with transitioning to entrepreneurship decreased.

Technological knowledge about information systems and automation was used by former employees as core elements of the business ideas. The creation of new ventures was driven by the desire to exploit these technologies, characterized by two main strategies: pursuing innovative paths in emerging sectors or taking a pragmatic approach in mature markets. Technological knowledge allows the entrepreneurs in the development phase to identify the key elements necessary to understand the feasibility of the business opportunity. On the basis of this, individuals could test business opportunities and define the elements of

the business necessary for the creation of the value proposition (Vogel, 2017). Finally, in the exploitation phase, the new ventures could differentiate their offerings due to the ability to engage with technology, which helps the new ventures to assess the value of new knowledge, incorporate and exploit it to adapt the offering to different markets or to introduce new offering (Zhang, 2016). In this way, the new venture can extend its portfolio and eventually increase its market share (Marcon & Ribeiro, 2021).

Market knowledge from the anchor firm allows individuals to access a broad amount of information, since the anchor firm operated in several markets. In this way, former employees could identify unmet needs or solutions in different markets, that are deemed as critical elements in the generation phase (Vogel, 2017). In the development phase, it is important to test the business opportunity through the iteration with the market. The knowledge of the market facilitates the identification of early customers instrumental to this cycle of feedback on the business opportunity, thereby helping to understand how to adapt or later capitalize on the business opportunity. In the exploitation phase, new ventures aim to expand their market share, and through their market knowledge can reach those customers who have not been suitable for the development phase as they require a more stable offering. In other words, market knowledge provides individuals with the ability to recognize the different types of consumers' adoption of new offerings (Bass, 1969). Furthermore, the new ventures could harness market knowledge to strengthen their relationships with customers, resulting in the consolidation and expansion of their market share.

Finally, being Olivetti an anchor firm, employees dealt with large scale projects and a big organizational structure. As a consequence of a crisis, former employees who developed managerial knowledge can decide to start a new venture having this expertise as the core value on which to build the value proposition of the business idea. Moving to the development phase, managerial knowledge is functional to refine all the relevant elements

necessary for the creation of the new venture, defining what are the revenue streams and costs. In this phase, the new venture has to assess the overall feasibility of the business opportunity (Marcon & Ribeiro, 2021), and managerial knowledge plays a critical role since it offers a broader picture of all the resources and activities necessary. When the new venture is in the exploitation phase, the individuals with managerial knowledge developed in an anchor firm can leverage their expertise to scale up the new venture operation since they are familiar with coordinating a high number of people and projects in their previous employment. These results add to the knowledge spillover theory of entrepreneurship, which stresses the importance of both technological and business knowledge to create a new venture, but considers the latter as complementary and only relevant for the commercialization of technological knowledge (Acs et al., 2013; Qian & Acs, 2013). In fact, the results of the study show that business knowledge, and in particular managerial one, can support entrepreneurs in spotting business opportunities, due to the high level of skills developed operating in an anchor firm. Furthermore, managerial positions within an anchor firm provide individuals with a high reputation which can last even when the firms cease to exist (Nyström, 2020). New ventures are created lacking the track record that can inform the market about the quality of the new offering (Stuart & Sorenson, 2005) and entrepreneurs leverage the reputation inherited in the anchor firm as a signal to the market to gain new customers.

The combination of the different types of knowledge enables the new ventures to operate effectively in industries that are either closely related or distant from their previous employment. This allows entrepreneurs to be influenced by external stimuli such as trends or peers' confrontation to create a new venture and extend their knowledge beyond anchor firm's boundaries, contributing to regional development.

5.1. Theoretical Contributions

With this study, I provide theoretical contributions to the entrepreneurial and regional studies. First, this study fills the identified gap by describing how individuals leverage the knowledge acquired during their tenure in the anchor firms after this firm's crisis (Nyström, 2020; Spigel & Vinodrai, 2021). Following the operationalization of the knowledge in technological, managerial, and market (Acs et al., 2013; Huber, 2013; Qian & Acs, 2013), this research provides a more nuanced characterization of the individuals who create a new venture as a consequence of former employment crisis. By doing so, this research sheds light on individuals' transition from employment to entrepreneurship and offers valuable insights into how human resources are recycled within an entrepreneurial ecosystem and how it reduces the negative repercussions stemming from the anchor firms' crisis on the entrepreneurial ecosystem (Sorenson, 2017; Spigel & Vinodrai, 2021).

Secondly, this work also increases our understanding of the new venture creation process (Davidsson & Gruenhagen, 2021). In particular, this work describes how the individuals' knowledge is used during the new venture creation process by focusing on each phase individually. Thus, it offers a dynamic perspective on the creation process, outlining how resources, specifically knowledge, play a role in the different activities of the creation process. In this way, the thesis advances the understating of how, through the knowledge developed in their previous experiences, entrepreneurs are able to determine the different elements instrumental to the business (Vogel, 2017).

Finally, it advances the understanding of the knowledge spillover theory of entrepreneurship (Acs et al., 2009; Agarwal et al., 2010; Caiazza et al., 2020; Qian & Acs, 2013) by providing new mechanisms that allow the knowledge of an anchor firm to be diffused within a region in the aftermath of the anchor firm crisis. It also reevaluates the role of business knowledge, that it is not merely complementary to the exploitation of

technological knowledge but can serve as the cornerstone of the new venture's value proposition.

The contribution of this work to the regional studies literature lies in the indirect influence that an anchor firm has, in the aftermath of a crisis, on regional development (Spigel & Vinodrai, 2021). In particular, individuals released by anchor firms are provided with superior knowledge and reputation that can be used to create a new venture which are instrumental to the creation of new knowledge, contributing to the regional development.

5.2. Practical Implications

The findings of this work provide practical insight to entrepreneurs, policymakers, and employees alike.

The framework developed in this work can help potential entrepreneurs leverage the knowledge owned for the creation of a new venture in the aftermath of an anchor firm crisis. In particular, they can identify in their expertise a potential business opportunity. Similarly, they can recognize niche markets to address, especially looking for those in which the anchor firm does not operate anymore. In addition to those insights, the framework can help entrepreneurs understand which kind of knowledge they lack while creating a new venture. In this way, entrepreneurs can look for co-founders who have this knowledge, as well as external collaborators or partners who may complement their knowledge.

Policymakers, on the other hand, may define specific policies to promote entrepreneurial initiatives in the aftermath of an anchor firm crisis. In particular, policymakers can offer personalized entrepreneurship courses to unemployed individuals to make them acquire the knowledge they lack. Furthermore, policymakers can support the creation of new ventures by former employees of an anchor firm that put their technological

and managerial knowledge at the core of the business idea. In this way, those policies can mitigate the negative consequences of the anchor firm crisis by supporting individuals becoming entrepreneurs while preserving crucial knowledge for regional development.

Finally, employees in an anchor firm can gain insight from the developed framework. Individuals can choose and construct a career path within the anchor firm that leads them to access and develop the knowledge necessary for the creation of a new venture. In particular, they might aim for different positions which could let them engage with different knowledge and broaden their expertise. In this way, those individuals would have, in a situation of crisis, the right tools that allow them the transition to entrepreneurship.

5.3. Limitations and Further Development

There are limitations to this work that can pave the way for future investigation. The sample selection includes cases from an anchor firm such as Olivetti, thus providing insights originating in a specific industry (i.e., digital) that may not be generalized for other industries (i.e., manufacturing). Hence, future investigations may include other cases of anchor firms, belonging to other industries, that faced a crisis. Furthermore, the cases focused on a particular geographical area such as the Piedmont region in Italy characterized by specific rules. A cross-region analysis might offer the opportunity to understand the role of regional policies and culture in the transition of individuals from employees to entrepreneurs.

This work opened new avenues for research as well. This study showed how knowledge can be leveraged for the creation of new ventures. Future studies can investigate which typologies of ventures are created (i.e., innovative or imitative) as well as analyze venture performance in terms of size, revenues, or years of survival. Finally, while this study showed which are the own elements on which entrepreneurs can rely for the creation process,

future studies can investigate how new ventures look for resources and knowledge that they do not possess and that are necessary to effectively run their businesses.

CHAPTER 3. ENTREPRENEURIAL MOBILITY: A RESOURCE-BASED INVESTIGATION ABOUT THE DECISION TO LEAVE.

1. INTRODUCTION

The location decision represents one of the first strategic decisions for a new venture since it impacts the availability and use of resources (Sirmon et al., 2011). Studies on the location of the new venture have shown that new ventures prefer to locate in the region where the founders were born, lived, or have deep roots (hereafter “home” region) (Dahl & Sorenson, 2012; Michelacci & Silva, 2007). This is due to several factors, such as the desire of founders to be closer to family and friends (Dahl & Sorenson, 2012), a better understanding of local business opportunities (Aoyama, 2009), and the presence of a social network with strong ties (Jack & Anderson, 2002). Indeed, by being embedded in a territory, entrepreneurs gain tacit knowledge that facilitates the identification of market needs, establish relationships that facilitate access to necessary resources, and be familiar with local culture, languages, and laws (Dahl & Sorenson, 2012). Additionally, locating away can lead to additional costs (Zaheer, 1995).

While it may seem straightforward that a new venture would choose to locate in the home region, this is not always the case. For instance, a recent report on startups commissioned by the EU showed that approximately 14% of European startups moved their headquarters during their creation phase to the US, the UK, or Israel (Onetti, 2017). Another study focusing only on unicorns shows that the percentage of those leaving UE is 27% (Testa et al., 2022). A similar trend affects the UK which, following the Brexit referendum, witnessed a drain of new ventures toward other countries (Butcher, 2016). Finally, in the US, new ventures tend to move towards specific locations, such as Silicon Valley, San Diego, Boston, and Austin, resulting in a high number of new ventures departing from their home region (Butler et al., 2020). Facebook, for example, founded by Mark Zuckerberg while he

was at Harvard University (Massachusetts), moved within a year to California. At that time, Silicon Valley was known for the availability of abundant resources such as funds and talents, and for its supportive entrepreneurial ecosystem (Suzuki et al., 2002). This phenomenon has been further incentivized by the startup visa programs launched by different countries (e.g., Canada, France, Germany, Italy, the Netherlands, Singapore, Spain, and the UK) which facilitate the process of obtaining a visa for individuals who decide to locate a new venture in those countries. Those programs aim to attract new ventures from all over the world. For instance, from 2014 to 2019, the Italian Ministry of Economic Development reported 434 applications for the startup visa program (MISE, 2020) while in the UK 1152 applications were approved in the period that goes from 2019 to the first quarter of 2022 (IMI, 2022).

Understanding this phenomenon represents a current challenge concerning the practical implications of new ventures deciding to leave their home regions. When a new venture moves to another location, it brings the potential benefits in terms of innovation, economic growth, and job creation with it (Vivarelli, 2013). On the other hand, a location that is able to attract new ventures, in addition to those benefits, gains also new knowledge that fosters regional development (Messeni Petruzzelli et al., 2009). However, from a theoretical perspective, the decision of a new venture to leave its region has received little attention. One reason for this could be attributed to the decreasing importance of location, as argued by some scholars (Cairncross, 2001) as a consequence of globalization and digitalization. In fact, globalization and digitalization have facilitated the mobility of several typologies of resources, allowing entrepreneurs to access them even though embedded in a distant location (Butler et al., 2020; Kalinic & Forza, 2012). Nonetheless, not all the typologies of resources can be easily moved. Indeed, some resources are location-specific and cannot be moved or replicated elsewhere (Markusen, 1996), being the result of

agglomeration economies (Aversa et al., 2021; Markusen, 1996) or local culture and tradition (Aoyama, 2009). Additionally, other resources might lose part of their value or may not fit with the new environment when moved to a different location (Aversa et al., 2021; Dahl & Sorenson, 2012).

Consequently, the location of the new venture and the resource procurement and management processes are strictly related (Sirmon et al., 2011). In fact, in the location decision, the new venture should consider the potential benefits and pitfalls of the different locations as well as the availability, accessibility, and suitability of resources (Adner, 2017; Autio et al., 2014). Effective resource management is crucial during the new venture creation process (Marcon & Ribeiro, 2021; Sirmon et al., 2011; Vogel, 2017), as resources, through their effective utilization, favor the achievement of competitive advantage and the creation of value for customers (Barney, 1991). To successfully navigate the creation process, the new ventures are called to effectively manage various resources, such as financial, social, human, physical, innovation, and organizational ones (Marcon & Ribeiro, 2021; Sirmon et al., 2011).

The creation of a new venture is a dynamic process (Davidsson & Gruenhagen, 2021; McMullen & Dimov, 2013) that begins with a business idea and ends when the new venture becomes a viable business activity (McMullen & Dimov, 2013) or ceases its existence (Soto-Simeone et al., 2020). This process starts with the action of the entrepreneurs to search for information useful to the creation of the new venture (Katz & Gartner, 1988), and it is typically described in three phases: generation, development, and exploitation (Davidsson & Gruenhagen, 2021; Marcon & Ribeiro, 2021; Vogel, 2017). During those phases, the new venture undertakes several activities requiring different typologies of resources (Vogel, 2017) and producing outcomes that can change the expectations about the new venture.

Hence, during the creation process, the new venture may potentially face the need to re-evaluate its resource needs and goals.

While some studies recognized the possibility for a new venture to relocate during the creation process (Butler et al., 2020; Stam, 2007), the extant literature has yet to fully consider how emerging necessities and changing goals affect the new venture location decision. In fact, existing literature tended to consider the location decision for the new venture as a static event, related to the beginning of the entrepreneurial journey (e.g., Butler et al., 2020; Dahl & Sorenson, 2012), and consequently overlooking how the different contingencies may influence the location decision. By conceptualizing new venture location decisions as a dynamic and ongoing process rather than a static event, scholars may offer a more nuanced understanding of how this evolves through the different phases of new venture creation. Such an approach would allow me to explore how the location decision may be affected by the need and availability of resources. In this way, the present study addresses another gap in the literature, as prior research often focused on investigating how specific typologies of resources, such as social and financial ones (e.g., Butler et al., 2020), affect new venture location decisions. However, a comprehensive perspective encompassing multiple resources is currently lacking in the extant understanding. Therefore, this work aims to contribute to the existing literature by concurrently scrutinizing the role of multiple resources in the location decision-making of a new venture throughout the creation process.

Hence, this study aims to analyze how the interplay between new ventures' resource requirements and local resource availability and accessibility may influence the strategic decision to leave the home region during the various phases of the new venture creation process. To the best of my knowledge, this is one of the first papers that, focusing on the new venture as the level of analysis, concurrently consider multiple typologies of resources and examine each phase of the venture creation process (Davidsson & Gruenhagen, 2021).

Specifically, I aim at answering the following research questions: *how do the resource requirements across the different phases of the new venture creation process affect the location decision?*

To do so, I conducted a multiple case study following the guidelines proposed by Voss (2010) and Barratt et al. (2011). Actually, this methodology helps to develop a rich understanding of complex phenomena and to define the variables affecting the phenomena, as well as explain their relationship (Eisenhardt & Graebner, 2007). I conducted semi-structured interviews with 11 entrepreneurs who have (re-)located their new ventures during the creation process. The analysis provides a framework showing the typologies of resources (physical, financial, human, social, innovation, and organizational) that influence the decision to leave of the new ventures in the different stages of the creation process (generation, development, exploitation).

This study provides implications for various streams of research within the entrepreneurship, regional studies, and resource management literature. In particular, this investigation advances the understanding of the entrepreneurial decision-making process (Butler et al., 2020) by digging deeper into the elements and beliefs that entrepreneurs consider relevant during the creation process of new ventures. This research also sheds light on how entrepreneurs assess the value of resources during different phases of the venture creation process, enriching our understanding of the resources that are deemed valuable for gaining a competitive advantage (Marcon & Ribeiro, 2021; Sirmon et al., 2011) and the different dynamics of the management of those resources (Davidsson & Gruenhagen, 2021; Shepherd et al., 2021).

This study also provides valuable insights for regional studies by emphasizing the regional perspective in relation to the new ventures' resources management process and by

investigating how the regional stock of resources affects the location decisions of new ventures (Spigel, 2017). I show how the stickiness and munificence of resources in a location influence the significance of a resource perceived by new ventures. Furthermore, I explore how new ventures cope with the lack of critical resources in their location, which adds to the resources management theory.

The practical implications of this work are twofold. For entrepreneurs, the study offers a framework that facilitates the understanding of the importance of the various typologies of resources. Entrepreneurs can use this framework to identify which resources are critical in each phase of the venture creation process and which resources can trigger the decision to move the new venture to a different location. This can help entrepreneurs to optimize their resource management strategies and make informed decisions about the location of their new ventures. By showing the importance of resources for new ventures during the different phases of creation, the study offers suggestions to policymakers on how to support new ventures in different phases of creation. For instance, policymakers can tailor strategies that aim to offer the resources that are important for a new venture in the phases that are most needed. This can help regions retain new ventures and prevent them from moving to other regions as well as attract new entrepreneurs.

2. THEORETICAL BACKGROUND

2.1. New Ventures Creation

The goal of this work is to understand the decision of a new venture to leave their home region during the creation process. It is important, therefore, to introduce how the literature has theorized the creation of the new ventures to gain insights into the different elements that characterize the process and how they can frame the location decision.

The new venture creation process starts with the intention of the entrepreneurs to transform a business idea into a viable business activity (Bird, 1988; Davidsson & Gruenhagen, 2021). The goal of this process is to achieve financial capability and have a stable position in the market, which is considered a successful completion of the creation process (Davidsson & Gruenhagen, 2021; Newbert, 2005). Throughout the creation process, a new venture undergoes several activities (Vogel, 2017) that the literature grouped into three main phases: generation, development, and exploitation of a business opportunity (Davidsson & Gruenhagen, 2021; Marcon & Ribeiro, 2021; Paschen, 2017; Picken, 2017; Vogel, 2017). The activities, forming the different phases, may require specific resources and produce outputs that may change the business opportunity and the entrepreneur's vision of the new venture.

Generation

During the generation phase, the business opportunity is still far from being mature, with only a vague vision and a few elements of the business already defined (Vogel, 2017) on the basis of the entrepreneurs' insights (Brush et al., 2001). The generation phase starts with the entrepreneurial actions aiming to better define the business idea (Bird, 1988), by searching for the information and resources that would be helpful to evaluate its potential (Marcon & Ribeiro, 2021), and validate the business concept (Paschen, 2017). During this phase, the resources that characterize the new ventures are mainly owned by the entrepreneurs (Aspelund et al., 2005). The activities in this phase usually require limited financial assets (Bakker & Shepherd, 2017; Von Briel et al., 2018).

Development

Starting from the elements identified in the generation phase, the entrepreneur shapes the business opportunity through an iterative process of experimentation and assessment (Vogel, 2017). The outcomes of the development phase support the assessment of the overall viability of the new venture (Marcon & Ribeiro, 2021). Hence, it represents a checkpoint for the entrepreneur's decision to exploit the solution in the market (Vogel, 2017), perform further tests (Chen, 2021; Cohen et al., 2019), pivot (Kirtley & O'Mahony, 2020), or stop the creation process (Vogel, 2017). In the development phase, new elements of the business such as customer segment, activities to create value, and partners are defined (Vogel, 2017), making clearer the bundle of resources required to realize the vision of the new ventures (Marcon & Ribeiro, 2021).

Exploitation

Once entrepreneurs are satisfied with the elements of the business defined in the development phase, the exploitation phase begins (Vogel, 2017). At this point, the elements characterizing the business of the new venture are defined (Vogel, 2017). Accordingly, the new venture implements effective, large-scale operations to produce and market the goods or services (Choi et al., 2008) and capture value (Eisenmann, 2021; Furr & Ahlstrom, 2011). These activities require the mobilization of a high quantity of resources (Marcon & Ribeiro, 2021). The aims of this phase are to create a strong customer base, enter and expand the presence in the market, and grow the organizational structure (Picken, 2017) to increase sales and become profitable (Paschen, 2017).

Throughout the different phases, the new venture faces different needs which require different activities, thus modifying the significance of those resources for the creation process. Understanding which, how and where to access resources is crucial since they are

necessary to create value (Baumol, 2010; Shane & Venkataraman, 2000; Shane, 2003) and to increase the likelihood of success of a venture (Sirmon et al., 2011). In the next section, I will present the resource management framework adopted in this work.

2.2. Resource Management

Marcon and Ribeiro (2021) proposed a framework that classifies the resources required during the new venture creation process into human, social, financial, organizational, innovation, and physical. Specifically, human resources relate to the knowledge and skills of the people working in the new venture, in the form of experiences, training, and expertise (Barney, 1991). Social resources are the set of relationships established by the new venture with external entities (Ireland et al., 2003). Financial resources refer to the monetary assets necessary to implement strategies and acquire further resources (Ireland et al., 2003). The venture's formal and informal structures and processes, in the form of business and management knowledge, are grouped as organizational resources (Barney, 1991; Marcon & Ribeiro, 2021). Innovation resources are all the routines, practices, and policies needed for the development or improvement of products, processes, and services (Marcon & Ribeiro, 2021). Finally, physical resources represent physical assets such as plants, tools, and equipment (Barney, 1991). The relevance of resources varies according to their fit with the new venture's vision and needs (Lichtenstein & Brush, 2001), and as discussed above, may change in every phase (Marcon & Ribeiro, 2021).

At the inception of the creation process, a new venture does not possess the resources required to build its resources portfolio, since, it can rely only on the founding team's resources (Aspelund et al., 2005). Therefore, it needs to access external resources (Marcon & Ribeiro, 2021), by interacting with the environmental and social context to access the

resources it needs (Spigel, 2017). The value and cost of a resource depend also on its availability. For instance, the more a resource is available, the less the competition to access that resource, which in turn lowers its costs (Desa & Basu, 2013; Klein, 1990). However, this is not the only element that influences the relevance of resources. In fact, resources can be idiosyncratic to a place, meaning that they are accessible only in the place where they are located (Aversa et al., 2021) making them “sticky” to a location. This might lead to a change in the resource management process because the new venture can access those resources only by being located in proximity. If not possible, the new venture has to access different resources. The availability and accessibility characterize the intrinsic value of a resource that plays an important role in the choice of location. To determine which resources to acquire and how and where to access them, the new ventures have to balance the trade-off between the costs associated with resource acquisition and its value (Drejer et al., 2022). This trade-off also involves the expected benefits that the resources may offer in the new venture's creation process. However, in the location decision literature, the role of the resources has received little attention, as it will be discussed in the next section.

2.3. Location Decision

While the extant literature has investigated the role of resources in the decision and creation of new ventures in the home region (e.g., Dahl & Sorenson, 2009; Dahl & Sorenson, 2012; Michelacci & Silva, 2007), few studies have scrutinized the role of the resources in the location decision of new ventures (e.g., Butler et al., 2020). The studies focusing on the decision to locate “home” found that new ventures place great value in being embedded in a familiar regional context (Dahl & Sorenson, 2009; Dahl & Sorenson, 2012) since they can access easily local resources. In fact, new ventures access tacit information about the local needs, problems and demands that helps to have a better sense of the opportunities within

the local market (Jack & Anderson, 2002). Furthermore, being embedded in the social network in the region facilitates access to resources such as financial resources from local investors, hire human capital, leverage local specific competence (Asheim & Isaksen, 2002), and further increase their social resources (Dahl & Sorenson, 2009; Dahl & Sorenson, 2012; Sorenson, 2018).

Investigating the decision to move the new ventures to different locations, Butler et al. (2020), focused on the influence of social and financial resources. From their research, it emerges that new ventures tend to relocate where they have a social network with higher density. Furthermore, the number of investment rounds raised within a region attracts new ventures because it represents a signal of more funding opportunities (Butler et al., 2020).

The entrepreneurial ecosystem stream of literature describing the regional elements that favor the creation and attraction of new ventures (Cavallo et al., 2019; Roundy & Fayard, 2019; Spigel, 2017; Stam, 2015; Steigertahl & Mauer, 2021) might provide insight in the location decision of new ventures. However, those studies adopt a “top-down” approach (Stam, 2015) and do not investigate how a new venture exploits the ecosystem (Sternberg, 2022) thus overlooking the new venture agency in the resources management and interaction with the ecosystem. Accordingly, this work puts the new venture as the center of analysis, providing another approach to the entrepreneurial ecosystem by investigating how the new venture decides how and where to access resources and eventually, where to locale.

Finally, some studies suggested that a new venture locating in a different location tends to face costs related to travel and transportation (Zaheer, 1995), information and search (Drejer et al., 2022), establishment of new relationships and legitimacy gaining (Zaheer, 1995). Finally, new ventures moving to locations with different cultures, laws, and

regulations may experience drawbacks and difficulties in adjusting to the new environment (Zaheer, 1995).

All those studies have investigated the location decision as a static event that can occur only at the inception of the new venture creation, despite recognizing that new ventures can move during other phases of the creation process (Butler et al., 2020). However, as previously discussed, the value of resources changes along the process, and this may affect the location decision during the creation process.

Accordingly, this gap motivates me to perform a study that, focusing on new ventures, investigates why and when a new venture decides to move to another location during the creation process.

3. METHODOLOGY

We carried out a multiple case study following the recommendations of Voss (2010) and Barratt et al. (2011). This method helps to identify the variables and characteristics of the phenomenon under investigation, as well as explain how they relate, making it particularly effective for building a deep understanding of complicated phenomena (Eisenhardt & Graebner, 2007). Furthermore, it allows to understand the “how” and “why” that govern a phenomenon (Yin, 2009). Finally, the qualitative method allows for a more thorough investigation of the subject and efficient theory development (Eisenhardt & Graebner, 2007). For all those reasons, the case study fits the objectives of this study which is to build a theory about the drivers of the new venture's decision to leave. The research design is split into three parts in the paragraphs that follow: data sampling, data collection, and data analysis.

3.1.Data Sampling

The sample selection aimed to identify cases of ventures that have moved during their creation process. I selected only ventures that moved from a developed country to another developed country since the resources that a new venture can access in developing countries are scarce compared to those in developed ones (Dencker et al., 2021). The search for relevant cases for this analysis started by looking for the alumni of incubators and accelerators. I chose organizations with international recognition operating in the US and Europe due to their similar economic system, allowing for homogeneity in the starting condition (Davidsson & Gruenhagen, 2021), all the while exhibiting unique points of distinction. In particular, I selected incubators and accelerators operating in the ecosystems that were among the top ranked in the Global Startup Ecosystem Ranking 2021 (Startup Genome, 2021). For each country, I selected the highest-ranked ecosystem to maintain balance across the different countries. Finally, to have a heterogeneous sample of new ventures in terms of industries, I chose only incubators and accelerators that have a cross-industry scope. For every venture in the alumni section, information about headquarters and founders was collected through LinkedIn and Crunchbase. Then, for every founder, their origins and past residences were checked by looking for their experience and education sections on LinkedIn. The criteria to consider if a venture has moved during the creation process was that none of the founders had lived for more than two years in the new location before the foundation of the new venture. In this way, I can reasonably assume that the choice to establish a new venture abroad is not due to entrepreneurs' personal reasons. I further expanded the sample through governmental reports describing cases of new ventures that moved during the creation process (e.g., Testa et al., 2022, Mind The Bridge). After identifying an initial sample of new ventures that decided to move during the creation process, I forwarded to them an invitation to take part in a semi-structured interview. A

questionnaire was sent to the ventures that agreed to participate, to control if the decision to move was related to personal reasons of the founders or related to the new venture. Furthermore, I selected only new ventures that moved within five years since most studies considered five years as the critical period in which new ventures may survive this time span (Shane, 2009; Soto-Simeone et al., 2020). The final sample was formed by 11 ventures (Table 3). Among those, three moved during the generation phase, four during the development phase, two during the exploitation phase, one moved two times during generation and development, and one moved three times during all the different phases.

Startup	Description	Home Location	Phase	New Location
Case A	Energy startup that develops thermochemical energy storage technology for natural gas power plant operators.	Michigan, US	Development	California, US
Case B	A startup that operates as a platform connecting companies with a global network of co-working spaces to enable remote working in professional workplaces.	Italy	Generation	Germany
Case C	Artificial Intelligence startup that offers a platform where is possible to create videos from text using artificial intelligence technology.	Hungary	Generation Development Exploitation	Denmark Germany UK
Case D	A startup that operates in market research by providing a business intelligence tool to collect, organize and analyze competitors.	Spain	Exploitation	California, US
Case E	A market research startup that offers solutions to measure and improve digital experiences.	Spain	Development	California, US

Case F	An Edtech startup that offers a tool for the collection of references and creation of citations, reference lists, and bibliographies in electronic documents.	Sweden	Generation Development	UK Sweden
Case G	A renewable energy startup that realizes machines for carbon capture from the atmosphere, while producing clean drinking water.	UK	Development	Hawaii, US
Case H	An environmental engineering company that uses biochar made from plant waste for carbon removal.	UK, Spain	Generation	Sweden
Case I	A startup that provides an autonomous robotic system to repel wildlife from cultivated lands.	Italy	Generation	Sweden
Case J	A software startup that builds and manages cloud infrastructures by centralizing and standardizing the infrastructure construction.	French	Exploitation	California, US
Case K	An information technology startup that provides software that operates as a voice assistant for deskless workers to remotely control any software system with voice.	Italy	Development	California, US

Table 3. Sample List

3.2. Data Collection

The data collection process was based on primary and secondary data to triangulate information to reduce bias and ensure robustness and validity (Eisenhardt, 1989; Yin, 2009). Before the interviews, preliminary information related to the venture and interviewers was retrieved through the use of an online questionnaire. Afterwards, the interviews with the founders of the new ventures included in the sample were conducted online using video

conferencing software (i.e., Zoom, Microsoft Teams, and Google Meet) and recorded for transcription purposes. The interviews lasted between 30 and 60 minutes. The interviews aimed to gather insights into the process of venture creation, determine at which stages the new venture moved, identify the bundle of resources internally owned and the resources the new ventures access externally, and determine which resources influence the decision to move.

Finally, the secondary data used to complement and validate the primary data were collected from pitches, newspapers, reports, videos, and podcasts as well as official documents retrieved from the new ventures' websites.

3.3. Data Analysis

The data analysis strategy comprises three phases: pre-analysis, content analysis, and treatment and interpretation of data, to allow a coherent description of the phenomenon (Bardin, 1977). The pre-analysis phase consisted of the discussion of the notes and the transcription of each case to check for the completeness of the information necessary for this research and to draft a report describing each case. In the content analysis, I clustered the resources according to their type (financial, social, human, physical, and organizational), their extent of stickiness, and the value they have for the new venture (low, medium, high). Finally, in the treatment and interpretation, I confronted the different cases through a cross-analysis to identify elements in common and divergences. This allowed me to develop the propositions.

4. RESULTS

4.1. Generation

The generation phase represents the beginning of the creation process and it is triggered by the decision of the entrepreneurs to act on the business idea (Davidsson & Gruenhagen, 2021; Vogel, 2017). The new location can trigger the decision to act on the business idea more than the home location as the founder of case B said: *“We would never have started if we were in Italy [...]. Being abroad we experience different situations that pushed us to believe in our idea and start to act on it”*.

The financial resources were important in their decision to start in a different location, as reported by the founder of case I: *“Here [in Sweden] we have the funds, here we can receive other funds, and we know more or less how to get those funds. In Italy we didn’t find them, actually we did, but were 10 times less than here in Sweden”*. Four out of five of the new ventures in the sample reported that accessing governmental grants was one of the reasons that pushed them to start their activities in the new location. They reported that those funds were usually non-repayable or interest-free loans that reduced or eliminated the need for the founders to use their own savings. Furthermore, governmental grants were accessible even though the business idea was still not yet fully developed. The new ventures reported that to access those grants, they must be established and incorporated in the same location of the funding government, thus making these financial resources “sticky” to the location. Case F reconsidered its decision to move to the UK due to the difficulties in finding governmental grants and moved to Sweden where they could access those grants. The facility to set up a new business was another element considered important for the location decision. For instance, case I reported that one of the criteria to decide where to locate was a *“place where there was easy bureaucracy to set up a new business”*. Similarly, case F reported that an important benefit to look for in the location: *“is the alignment between government and*

innovation and entrepreneurship”. Finally, case B decided to not start the creation process in their country since they felt Italy did not have the right policies that sustain entrepreneurship. Innovation resources were considered crucial for a new venture in the decision to leave. Furthermore, Case I reported: “*We had the feeling that the customers in Sweden have a culture that was more open to innovative solutions*”. This allowed case I to work closely with the customers and start to collect information useful to understand the potential of their venture. The innovation resources required in this phase are embedded in the culture and the institution of a place, which makes them idiosyncratic to the location.

The new ventures in the sample reported that being at the beginning of their experience as founders of new ventures, they could rely only on their own knowledge and organization resources which they felt to be not enough for starting the creation process. Hence, they relied on incubators and accelerators to retrieve those resources. Case B considered several incubators from different countries and chose the one that offered the programs that best fit their needs. Knowledge and organization resources might be considered portable since incubators also offer remote service and support, and these possibilities increase with COVID-19. However, the human connection with organizational resources owners is considered very important by the new ventures since it allows faster and direct access to those resources as reported by cases B and I. The importance of organizational resources is evident also in case C, which being unsatisfied with the quality of the organizational resources available in Denmark, decided to move to Germany.

From the analysis of the cases, it emerged that human resources did not influence the decision to leave. This is due to the type of activities carried out in this phase, which aim to validate the business and hence require low financial assets. Only case I hired local employees for a short period, but they reported that this did not influence their location

decision. Similarly, the physical resources were not mentioned as important in the location decision.

Finally, case B gave attention to the availability of social resources during the location decision, looking for an environment that promotes social events that allow the new venture to promote itself. However, cases C and I, while considering the importance of the social resources in the creation process, did not include them as one of the main drivers for the location decision since those resources were not sticky to the location.

Overall, in the generation phase, the possibility to access financial, organizational, and innovation resources had high relevance in the location decision, while social resources were partially important due to the fact that both strong ties, which they have in their home region, and dense network, which might be found in a new location, bring advantages to the new venture, thus making the social resources less important in the location decision. Finally, no relevance in the location decision was found for human and physical resources, since the new venture is, at this point, still a newborn structure that does not need skilled employees or particular tools or equipment.

Proposition 1a. In the generation phase, financial, organizational, and innovation resources have a high influence on the location decision.

Proposition 1b. In the generation phase, social resources have a medium influence on the location decision.

Proposition 1c. In the generation phase, human and physical resources have low influence in the location decision.

4.2. Development

Once a new venture validates the idea during the generation phase, it moves into the development phase. In this phase, the new venture starts to develop products or services (Marcon & Ribeiro, 2021).

The interviews showed that the new ventures in the sample started to look for private funds that might provide more financial resources during the development phase. Those funds were provided by private investors such as venture capital or business angels who did not include the condition of being closely located as mandatory in the investment. In fact, case A received an investment from venture capital from San Francisco on their decision to move there stated that: *“It was our decision even [if] they proposed us to move, but it was our decision”*. Similarly, case D said: *“They told us to come to the US, but it wasn’t like ‘If you don’t come here, we don’t invest in you’”*. Therefore, the financial resources in the development phase are less sticky than in generation one, thus reducing their influence on the decision to leave.

In the development phase, the new venture starts R&D activities to develop the product or service. Cases A and E reported how important was to be closer to customers familiar with innovation that are ready to collaborate. The culture of the customers toward innovation helped the new ventures to test the business opportunity. As reported by case E, they changed how the business opportunity was delivered to the market, moving from an on-premises business to a software-as-a-service (SaaS) as a result of the proximity to customers with an open mind. This showed the importance in the development phase of the innovation resources for testing and refining the business opportunity. Furthermore, other elements of innovation resources such as the entrepreneurial culture were considered important since it allows them to meet other entrepreneurs who share their experience about the creation process. In fact, case D said: *“This culture, this spirit, it is something you can experience*

only being there. Before moving we were attracted to the entrepreneurial culture, but we didn't expect to be like that". This highlights the fact that those resources, being sticky, highly influence the decision for the new ventures to move.

The entrepreneurial culture also affects the availability of organizational resources as reported by case D: *"You have a culture of entrepreneurship. You have resources that are not just money or capital, but also knowledge. You have a ton of advisors. People who have already made it, and can advise you on how to scale. You know lots of management expertise"*. The facility to access relevant business information from the environment due to the high availability of innovation resources, reduced the importance of organizational resources. Furthermore, venture capitalists investing in new ventures often provides business and organizational competences that reduce the necessity of new ventures to search for them. The importance of the organizational resources in the location decision in the development phase is connected to other resources (i.e., innovation and financial), thus having a limited influence.

In the development phase, the new venture starts to think strategically in the long run as reported by case A: *"We expected to grow exponentially, to have maybe 200 employees in two or three years. So, we were looking to a place where you can find talents, or it was easy to attract talents"*. Similarly, case G explaining why they decided to go to the new location stated: *"It was a business decision driven by a partnership with a company [...]. They had existing infrastructure we could plug onto that saved us a lot of time"*. The importance of the infrastructure was then reaffirmed when discussing the different locations considered *"We needed sea access. The existing infrastructure decided it for us"*. This shows how, in this phase, the importance of human and physical resources increases. However, other cases in the sample decide to adopt different strategies for human capital, such as

keeping part of the activities in the home country while moving the headquarter and the rest of the activities to the new location (cases E, F, and K), or accessing them remotely (case C).

In the development phase, more elements of the business model are defined, such as customers and partnerships necessary to access resources and capabilities (Vogel, 2017). For the new ventures was important to have a social network on which they could rely and bring fast feedback, since as reported by case G: *“Time is key for us”*. New ventures that decided to move already had a network in the new location, as in case E, or could rely on the network of the venture capital, as reported by case A: *“You go there [in San Francisco] and choose the venture capital, but not only for the money, but also for the link and connection that they bring”*. The importance of the network is also shown by case C which after deciding to move to Germany for the development phase, realized that the network they had in Germany was too small, and therefore decided to move back to Hungary where they can rely on a stronger network. Similarly, case B reported that the network in the home region was another reason that led them to go back. Finally, case F decided to go back to Sweden where they could rely on a social network with stronger ties.

In conclusion, the development phase represents a turning point for the creation process. In fact, in the development phase, the new venture typically is endowed with enough information to decide if proceeding with the exploitation of the business opportunity or terminating the process (Vogel, 2017). The geographical proximity with innovation resources supports the new ventures in developing the business opportunity by a process of testing and feedback, thus influencing their decision to move into a supportive environment. Financial resources, compared to the previous phase, are less sticky to a location, allowing the new venture to access those even without moving to a location, thus having a limited influence on the decision to move. Organizational resources are strictly related to financial ones, as a consequence of the investments of private entities that provide business

knowledge, and of the entrepreneurial culture of a region that creates an environment where business and organizational knowledge are easily accessible. Finally, being human and physical resources accessible by using different strategies, their influence on the location decision is partial.

Proposition 2a. In the development phase, innovation resources have a high influence on the location decision.

Proposition 2b. In the development phase, financial, social, organizational, human, and physical resources have a medium influence on the location decision.

4.3. Exploitation

In the exploitation phase, the new ventures have the goal to scale and increase their sales to reach business viability (Marcon & Ribeiro, 2021).

At this point, the need for financial resources increases exponentially (Marcon & Ribeiro, 2021). Due to the bigger amount of money involved in this phase, new ventures feel that being closer to potential investors facilitates access to funds since direct contact fosters communication and trust. As reported by case D: *“The money is there, right, so if you need this fund to build something that big, you have to go there. But to do so, you need to be an American company, you cannot be Southern European company.”* This shows also that the financial resources in this phase have a higher degree of stickiness since the investors prefer to operate with the rules, laws, and standards of their country.

In the exploitation phase, the new venture has a product that is already developed and ready for the market and needs to refine the solution and scale (Marcon & Ribeiro, 2021). Case J explaining the reason why they decided to move to the US said: *“Easiness to access*

the market plus it's the biggest market in the world and because the EU market doesn't help tech startups, especially deep tech, and innovative ones". Therefore, being closer to a market composed of early adopters that is more willing to accept an innovation is considered important in the location decision. Another element that motivates the new ventures to move is related to the innovation policy in the new location. Case D for instance stressed the importance of bureaucracy in the US that helped them to save time and concentrate on scaling the new venture. The same founder also stresses the importance of American regulation to protect the interest of founders and investors, favoring the collaborations between the two actors and facilitating the integration of new members, that bring organizational resources. New ventures reported that, while looking for funds, they take into consideration also the organizational resources that venture capital could bring.

Furthermore, new ventures looked for skilled human resources to increase their sales. For instance, entrepreneurs of case D said that, after they entered the US market, they felt the necessity to move and find employees who knew better that market. Also, some locations attract a pool of skilled workers that new ventures consider as an important asset to gain competitive advantage. However, similarly to the development phase, human resources are not sticky to a territory and can be easily accessed, limiting their influence on the location decision. For example, cases D and J kept part of their engineering team in their home region.

None of the cases in the sample considered the physical resources important in this phase of creation.

The social resources in this phase must facilitate the diffusion and scaling of the new ventures (Marcon & Ribeiro, 2021). Unlike what happened in the development phase, the new venture looks for a high density network. The network structure is something

idiosyncratic to a place, therefore pushing a new venture to move to a place where a denser network is already available or easy to create.

Due to the higher volume of resources needed, a location with the availability of social resources assumes high relevance in the decision of location. Furthermore, exploiting the business opportunity requires the new venture to undertake activities that aim to scale their operation which are costly and require a high amount of funds. Innovation resources are critical in the exploitation phase because help the new venture to gain market share. The organizational resources are subordinated to the financial ones due to the role that venture capitalists assume in the new venture after the investments. Human resources bring skills and talent to the new venture, which might also be accessed remotely with different strategies, thus limiting their influence. Finally, physical resources do not appear to influence the decision.

Proposition 3a. In the exploitation phase, innovation, financial and social resources have a high influence on the location decision.

Proposition 3b. In the exploitation phase, organizational, and human resources have a medium influence on the location decision.

Proposition 3C. In the exploitation phase, physical resources have a low influence on the location decision.

5. DISCUSSIONS AND CONCLUSIONS

This work aims to investigate the new ventures' decision to leave their home region and establish elsewhere during their creation process. In particular, the findings provide insights into the role of different types of resources in the location decision. Building on the

framework presented by Marcon and Ribeiro (2021), this work considered a set of six different types of resources, namely financial, innovation, organizational, human, physical, and social and investigated the role of each resource by looking at each phase of the creation process. Accordingly, I offer a dynamic view of the location decision.

In the generation phase, the financial resources of new ventures are represented by the founders' personal savings, as well as by funds that come from the so-called FFF (family, friends, and fools) or governmental grants (Hellmann, 2007). These financial resources support the cost of starting up. Therefore, new ventures may move to a new location attracted by governmental grants. In this phase, the risk and uncertainty around the new venture are very high, since the business idea is in a preliminary stage and not yet validated by the market (Vogel, 2017). Governmental investments are often provided as non-repayable grants or interest-free loans that reduce the risks of losing entrepreneurs' personal savings, supporting those new ventures that still have to validate their business idea. The availability of innovative resources represents another factor that motivates the reason to leave, being they the results of national or regional policies that are specific to a location. Those resources may facilitate the creation of a new venture and provide the routines necessary to set up the new entity (Marcon & Ribeiro, 2021). Innovative resources tend to be sticky, therefore they may push new ventures to relocate to access them. In the generation phase, entrepreneurs might have low business knowledge since they are at the beginning of their entrepreneurial journey (Lee & Kim, 2022). This knowledge is usually bundled into the organizational resources and may help the new venture to understand the potential of the business opportunity (Marcon & Ribeiro, 2021). New ventures access organizational resources through incubators and accelerators. Having direct contact with the providers of those resources is considered important by new ventures that, consequently, may decide to locate close to them. In the generation phase, the human resources did not need to be highly skilled since the new venture

is defining the basic elements of the future business (Vogel, 2017) and the activities carried out are usually low budget (Shepherd et al., 2021). As a consequence, human resources do not influence the decision to leave in the generation phase. In a similar vein, physical resources are not important for the activities carried out in this phase, having no role in the location decision. Finally, in this phase, there are defined only a few elements of the business and it is still unclear the relationship needed for the successful creation of the new venture (Vogel, 2017). The role of social resources in the decision to move is secondary since they are still unsure of which kind of actors are important to include in their network.

In the development phase, the interaction with the market allows the new ventures to access innovative resources by enabling cycles of tests and feedback that help the development of the business opportunity. This is considered crucial because they offer important insight into the viability of the products or services. Being closer to the market, and consequently to innovative resources, makes the interaction with the customers faster and easier and allows for timely adjustment to the business opportunity. Therefore, the new ventures are aware of the bundle resources required to create and capture value. To access those resources, the new ventures need to rely on a social network with strong ties. In line with the evidence found by Butler et al. (2020), this work shows that new ventures relocate if a network is already established in the new location. The amount of money raised by the new venture in the development phase is higher than the one in the generation phase. The funders change in this phase, being represented by private entities such as venture capitalists and business angels. Venture capitalists can decide to invest in new ventures that are not closely located (Schertler & Tykvová, 2011). This allows new ventures to access financial resources remotely, thus limiting the importance of financial resources in the decision to leave. Venture capitalists provide not only financial resources but also organizational resources (Zider, 1998). The relevance of organizational resources is subordinate to the

financial ones, thus lowering their influence on the decision to leave. In the development phase, a new venture starts to plan the technological development of the product or service (Vogel, 2017), which requires skilled human resources and infrastructures that are functional to the business (Bhave, 1994). This long-term strategy increases the importance of physical and human resources in the creation process. However, being those resources remotely accessible or mobile, their influence in the decision to leave is limited.

Finally, in the exploitation phase, the new ventures have to manage more resources since in this phase they need to expand their operation to become profitable (Paschen, 2017). The high amount of funds involved in this phase pushes venture capitalists to invest in new ventures that are located in the same region and thus operate under the same standards and rules. The financial resources are sticky and lead new ventures to move if they want to access those funds. Venture capitalists bring organizational resources that are important for the new ventures to exploit their products on the market. Similarly to what happened in the development phase, the organizational resources are tied to the financial resources, thus having a limited influence on the location decision. The new ventures need to increase their market share and sales (Paschen, 2017), so they move to locations with a market that is more receptive and accepts new entrants. This makes the innovative resources important for the decision to leave, since the closeness to the market, similar to what happens in the development phase, helps the new ventures to respond faster and more accurately to the market needs. Along with the growing need for additional resources, new ventures may look for a location where social resources are abundant since a dense social network facilitates their retrieval (Butler et al., 2020). Investments in physical resources are usually made in the development phase since in that phase the new venture understands the instruments and tools necessary and decides which strategy to follow to access them. This leads physical resources to have a low influence on the decision to leave. Differently, human resources have a medium

influence on the decision to leave, since more skilled personnel might help to scale the operations, but they can be accessed with different strategies. Figure 1 summarizes the relevance of each resource in the location decision during every phase of the creation process.

	Generation	Development	Exploitation
Innovation	★★★★	★★★★	★★★★
Financial	★★★★	★★★☆☆	★★★★
Social	★★★☆☆	★★★☆☆	★★★★
Human	★★☆☆☆	★★★☆☆	★★★☆☆
Physical	★★☆☆☆	★★★☆☆	★★☆☆☆
Organisational	★★★★	★★★☆☆	★★★☆☆

★★★★ Indicates high influence in the location decision

★★★☆☆ Indicates medium influence in the location decision

★★☆☆☆ Indicates low influence in the location decision

Figure 1 Relevance of Resources for Location Decision

5.1.Theoretical Contributions

The study provides theoretical contributions to the entrepreneurial, regional studies, and resource management streams of literature. First, this work sheds light on entrepreneurial decision-making (Butler et al., 2020), by showing the mechanisms influencing the entrepreneurial judgment when deciding where to locate the new venture during its creation process. In particular, this study describes how the location decision is affected by the necessity of accessing specific resources. Moreover, this work extends the comprehension of the new venture creation process (Davidsson & Gruenhagen, 2021; Shepherd et al., 2021), by offering a dynamic perspective of the location decision process. Actually, the findings show that the resources involved in the creation process have an influence on the location

decision that evolves during the three phases characterizing the creation process, according to the actual needs of the new venture.

This study also contributes to the regional studies literature by showing how the regional endowment of resources may attract or dissuade new ventures to locate in a region. The contribution emphasizes how a new venture makes use of the resources available in an entrepreneurial ecosystem, offering a bottom-up view of the ecosystem that contrasts the traditional view of “top-down” used in entrepreneurial ecosystem studies.

Finally, this study advances the understanding of resource management processes, by showing how the relevance of the different resources influences the strategies implemented by a new venture to manage those resources. Furthermore, by describing the significance of resources in the location decision, this research identifies which resources are perceived as valuable for gaining a competitive advantage (Marcon & Ribeiro, 2021; Sirmon et al., 2011).

5.2. Practical Implications

The findings allow to provide practical implications for both entrepreneurs and policymakers. Entrepreneurs can use the framework developed in this work to identify the most relevant resources in each phase of new venture creation and understand the costs and benefits of accessing resources remotely or by deciding to relocate their business. In this way, while scanning new locations, entrepreneurs may look for a set of specific resources and decide how and where to access the resources they need.

Policymakers, on the other hand, may change their perspective on the policy implemented to stimulate the establishment of new ventures. This work, by using the new venture as the level of analysis, offers a framework that identifies the importance of the resources and their attractiveness during the phases characterizing the venture creation

process. Hence, policymakers can develop policies addressing the specific resource needs of new ventures, according to the phase they are in. This may limit the drain of new ventures while attracting new ventures from other locations.

5.3.Limitations and Further Development

This work is, of course, not exempt from limitations that may pave the way for further research. I aimed at selecting and analyzing a broad and heterogeneous sample of cases to allow the generalization of the results. However, the sample includes more ventures belonging to the service industries rather than ventures belonging to the goods industries. Thus, the sample selection may have led to overlooking factors that are more relevant in the service industries (e.g., human capital) in comparison with the manufacturing industry (e.g., infrastructures). Hence, future investigations may analyze how the location decision is affected by the features of specific industries. Furthermore, the cases were selected on the basis of the lists of alumni of incubators and accelerators, which may be deemed as resource providers and consequently generate bias in the role of incubators and accelerators and their resources in the location decision. Future studies can apply different techniques for sampling the cases.

This study also paved the way for other investigations. The research showed that the new venture must access some resources locally while others can be accessed remotely from different locations. The new venture can potentially construct a global network of resource providers. Future studies can investigate how the new ventures construct this network and how it influences resource management. Finally, COVID-19 has started a new trend in entrepreneurship, where new ventures are founded by teams of entrepreneurs who may decide to work in different places. Further investigations into team formation and

cooperation dynamics may focus on how the interaction among entrepreneurs and employees working in different locations may influence the new venture creation process.

CONCLUSION

The aim of the thesis is to increase our knowledge of the relationship between the regional context and the creation of new ventures. The creation of a new venture is a process that starts with the action of entrepreneurs on a business idea with the goal of becoming a viable business entity (Davidsson & Gruenhagen, 2021). Through the process, the new ventures interact with the external environment, influencing and being influenced by the regional context (Autio et al., 2014; Spigel, 2017). Given the importance of new ventures in the economic and social development and welfare of a region (Gu & Qian, 2019; Xu et al., 2021), I identified regional elements that may support the creation of new ventures. The regional context comprises elements that are idiosyncratic and sticky to the location (Aoyama, 2009; Aversa et al., 2021) that being accessible only within the region's proximity, provide peculiar contributions to the creation of the new ventures. Moreover, the significance of the region's impact depends on the specific phase of the venture creation process. In alignment with literature that divides the process into three phases (Marcon & Ribeiro, 2021), I investigate how regional factors vary their influence on new ventures according to the phase of new venture creation. This was done through three studies that generated the three chapters of this thesis. In the first chapter, through a single case study on Astroscale, I described how a peculiar element of a region such as the RL (Aoyama, 2009) supports new ventures to overcome the risks related to the lack of legitimacy and liability of newness, thus increasing their likelihood of survival (Soto-Simeone et al., 2020). Following, in the second chapter, I conducted a multiple case study to study how the knowledge developed by individuals working in an anchor firm supports the creation of new ventures in the aftermath of the anchor firm's crisis. Finally, in the third and last chapter, through a qualitative study on new ventures that have moved during the creation process, I shed light on the location decision

of the new ventures, focusing on the influence of resources on the decision of new ventures to leave during the different phases of creation.

In particular, in the first chapter, by analyzing the case of Astroscale, I examined the mechanisms used to reduce the risks that hinder the likelihood of the new venture's survival. I found that the RL supports radically-INV's both in increasing the legitimacy and reducing the liability of newness, showing the critical role that the RL has in the new ventures' creation process. With this study, I aimed to make several contributions. Firstly, this work contributes to entrepreneurship literature by examining new ventures' mechanisms and strategies to gain legitimacy (Kuratko et al., 2017; Navis & Glynn, 2011; Zimmerman & Zeitz, 2002). Specifically, it analyzes how a region's culture and tradition can be leveraged to support manipulation and narrative strategies aimed at acquiring legitimacy. Existing literature has highlighted the importance of manipulation strategies (Zimmerman & Zeitz, 2002) and when to employ such strategies (Kuratko et al., 2017). This study adds insights that explain how elements of the regional legacy can be leveraged to facilitate the acceptance of the new value proposition. Secondly, this study provides new elements that support new ventures in reducing the liability of newness. In particular, it describes how the RL allows new ventures to identify and access resources in their proximity by leveraging the industrial tradition. In this way, the study contributes to the entrepreneurship literature and, in particular, to those scholars who investigate the liability of newness and continually seek strategies and mechanisms to overcome this liability (Soto-Simeone et al., 2020). Third, building on the call for deeper exploration of the role of culture in entrepreneurship by Cornelissen et al. (2017), this study enhances our understanding of how culture, in the form of RL, can contribute to the creation of new ventures, and in particular to those that are characterized by the highest degree of innovation. Lastly, by focusing on radically-INV's, this work provides deeper insights into the dynamics behind the survival of this specific typology of new

ventures. Entrepreneurship literature has often treated INVs as a homogenous category of ventures (Cliff et al., 2006; Koellinger, 2008), without making distinctions within this broad group based on their degree of innovation. This study, concentrating on the specific typology of radically-INV's, describes the distinct features and dynamics that define them (Samuelsson & Davidsson, 2009). From a practical standpoint, this work presents potential benefits for entrepreneurs and policymakers by illustrating how certain contextual attributes can enhance the survival prospects of radically-INV's within a specific region. New ventures with a unique value proposition can scan their surroundings to identify and harness aspects of culture and tradition that align with the business opportunity they seek to explore. Alternatively, they may choose to initiate their venture in a geographic area that embodies these elements. Policymakers, on the other hand, can direct their efforts towards policies that bolster the business and industrial tradition, thus nurturing the RL.

In the second chapter, I investigated how individuals create a new venture by leveraging the knowledge developed in an anchor firm in the aftermath of the anchor firm's crisis. What emerged is that technological, managerial, and market knowledge acquired in the anchor firm are leveraged by the individuals throughout the different phases. In particular, technological and managerial knowledge are used, in the generation phase, to create the core business opportunity and to expand the market share in the exploitation phase. In addition, in the development phase, technological knowledge allows new ventures to test the business opportunity, while managerial knowledge facilitates the identification of the necessary elements for developing the business opportunity. Market knowledge also influences the creation of the new venture, by validating the potential of the business idea in the generation phase, identifying the first customers in the development phase, and finally, in the exploitation phase, by expanding their market share. The research provided several theoretical implications. First, this research enhances our understanding of the new venture

creation process (Davidsson & Gruenhagen, 2021) by delineating how individual knowledge is applied across the various activities encompassing the three phases of the creation process. In particular, it demonstrates how the knowledge individuals acquired during their period at the anchor firm can be utilized to pursue an entrepreneurial career. In the domain of regional studies, this work contributes by highlighting the role that an anchor firm, through its former employees, can play in regional development in the aftermath of a crisis (Spigel & Vinodrai, 2021). The outcomes of this research offer valuable practical insights for entrepreneurs and policymakers. The framework developed within this study serves as a guiding tool for entrepreneurs, aiding them in understanding the knowledge essential for initiating a new venture, as well as for policymakers to implement policies that support individuals in creating new ventures in the wake of a crisis involving an anchor firm.

The third chapter focuses on the new ventures' decision to leave during the creation process by looking at the role of resources. The findings of this study showed that innovation resources have a high influence on the decision to leave throughout the whole creation process. Financial resources highly influence the new venture location decision during the generation and exploitation phase, while is medium in the development phase. Social resources have a medium influence in the generation and development phase but are highly influencing the new venture to move during the exploitation phase. Organizational resources, on the contrary, have a high influence in the generation phase, and a medium influence in the development and exploitation phase. Finally, human and physical resources have a low influence in the generation phase and a medium influence in the development phase. In the exploitation phase, however, human resources have a medium influence, while physical have a low influence. The research conducted in this study holds significant theoretical implications, offering theoretical advancements in the realms of entrepreneurship, regional studies, and resource management literature. Primarily, this research explains new dynamics

behind entrepreneurial decision-making (Butler et al., 2020) by describing how new ventures determine the location that best fits their needs for the creation process. Specifically, it describes how the decision to leave the home region is influenced by the set of resources necessary in the different phases of venture creation. Additionally, this study advances the regional studies literature by demonstrating how the regional resource endowment can lead new ventures to be established in a particular region. Lastly, this study contributes to the stream of literature on resource management theory by unveiling how the significance of resources varies and which resources are perceived as pivotal in gaining a competitive advantage (Marcon & Ribeiro, 2021; Sirmon et al., 2011). The framework developed in this study offers practical implications for entrepreneurs and policymakers. Entrepreneurs can utilize the framework to recognize key resources in each stage of creating a new venture, comprehending which resources can trigger the decision to relocate their business. On the other hand, policymakers can build policies aiming at addressing the distinct resource requirements of ventures at different phases, potentially reducing the new ventures' drain and attracting new ventures from other locations.

Overall, this thesis increases our understanding of the creation of new ventures offering a dynamic view that describes the whole process from the beginning of the entrepreneurial process to the survival of the new ventures (Davidsson & Gruenhagen, 2021; Shepherd et al., 2021). The thesis investigates different elements that influence the generation, development, and exploitation phases, describing how specific knowledge and resources play a role in the different activities of the creation process. In this way, the thesis offers a broader picture of the process of creation by including those external elements that are contingent on the new venture (Davidsson et al., 2020). Moreover, by looking at each phase of the creation process, the thesis provides further details characterizing the generation, development, and exploitation phases.

In addition, this thesis contributes to the regional study and entrepreneurial ecosystem by providing a different approach to the role of the region in the creation of new ventures. Indeed, the findings of this thesis describe how a new venture utilizes the available knowledge and resources within an entrepreneurial ecosystem, offering a bottom-up perspective, which juxtaposes the conventional "top-down" approach often employed in studies pertaining to entrepreneurial ecosystems (Thompson et al., 2018). In this way, the thesis offers a more comprehensive picture of the relationship between the new venture and the regional context, highlighting how the new ventures interact within an ecosystem while influencing regional development with its agency.

In conclusion, the thesis shows that the regional context offers new ventures with idiosyncratic elements that might be leveraged for the creation process. At the same time, these idiosyncratic elements might be the results of business and industrial traditions that are shaped by entrepreneurial activities. Throughout the process, new ventures access regional elements that might influence the different activities as well as strategic decisions such as the location decision. The understanding of which resources and knowledge are crucial for new ventures is critical for both entrepreneurs and policymakers who can frame their strategies and policies to support the creation of new ventures.

REFERENCES

- Acs, Z. J., Audretsch, D. B., & Lehmann, E. E. (2013). The knowledge spillover theory of entrepreneurship. *Small Business Economics*, 41(4), 757-774.
<https://doi.org/10.1007/s11187-013-9505-9>
- Acs, Z. J., Braunerhjelm, P., Audretsch, D. B., & Carlsson, B. (2009). The knowledge spillover theory of entrepreneurship. *Small Business Economics*, 32, 15-30.
- Adner, R. (2017). Ecosystem as Structure: An Actionable Construct for Strategy. *Journal of Management*, 43(1), 39-58. <https://doi.org/10.1177/0149206316678451>
- Agarwal, R., Audretsch, D., & Sarkar, M. (2010). Knowledge spillovers and strategic entrepreneurship. *Strategic Entrepreneurship Journal*, 4(4), 271-283.
- Agrawal, A., & Cockburn, I. (2003). The anchor tenant hypothesis: exploring the role of large, local, R&D-intensive firms in regional innovation systems. *International journal of industrial organization*, 21(9), 1227-1253.
- Aldrich, H. E., & Fiol, C. M. (1994). Fools rush in? The institutional context of industry creation. *Academy of management review*, 19(4), 645-670.
- Ansari, S., Garud, R., & Kumaraswamy, A. (2016). The disruptor's dilemma: TiVo and the US television ecosystem. *Strategic management journal*, 37(9), 1829-1853.
- Aoyama, Y. (2009). Entrepreneurship and regional culture: The case of Hamamatsu and Kyoto, Japan. *Regional Studies*, 43(3), 495-512.
- Arrak, K., Kaasa, A., & Varblane, U. (2020). Regional Cultural Context as a Determinant of Entrepreneurial Behaviour: The Case of Germany. *The Journal of Entrepreneurship*, 29(1), 88-118. <https://doi.org/10.1177/0971355719893501>
- Asheim, B. r. T. (1996). Industrial districts as 'learning regions': a condition for prosperity. *European Planning Studies*, 4(4), 379-400.
- Asheim, B. T., & Isaksen, A. (2002). Regional Innovation Systems: The Integration of Local 'Sticky' and Global 'Ubiquitous' Knowledge. *The Journal of Technology Transfer*, 27(1), 77-86. <https://doi.org/10.1023/A:1013100704794>
- Aspelund, A., Berg-Utby, T., & Skjevdal, R. (2005). Initial resources' influence on new venture survival: a longitudinal study of new technology-based firms. *Technovation*, 25(11), 1337-1347.
<https://doi.org/https://doi.org/10.1016/j.technovation.2004.06.004>
- Audretsch, D. B., & Keilbach, M. (2004). Entrepreneurship and regional growth: an evolutionary interpretation. *Journal of evolutionary economics*, 14, 605-616.
- Audretsch, D. B., Lehmann, E. E., & Plummer, L. A. (2009). Agency and governance in strategic entrepreneurship. *Entrepreneurship theory and practice*, 33(1), 149-166.
- Audretsch, D. B., Obschonka, M., Gosling, S. D., & Potter, J. (2017). A new perspective on entrepreneurial regions: linking cultural identity with latent and manifest entrepreneurship. *Small Business Economics*, 48(3), 681-697.
- Autio, E., Kenney, M., Mustar, P., Siegel, D., & Wright, M. (2014). Entrepreneurial innovation: The importance of context. *Research Policy*, 43(7), 1097-1108.
<https://doi.org/https://doi.org/10.1016/j.respol.2014.01.015>
- Aversa, P., Bianchi, E., Gaio, L., & Nucciarelli, A. (2021). The grand tour: the role of catalyzing places for industry emergence. *Academy of management journal(ja)*.
- Bahrami, H., & Evans, S. (1995). Flexible re-cycling and high-technology entrepreneurship. *California Management Review*, 37(3), 62-89.
- Bakker, R. M., & Shepherd, D. A. (2017). Pull the Plug or Take the Plunge: Multiple Opportunities and the Speed of Venturing Decisions in the Australian Mining Industry. *Academy of management journal*, 60(1), 130-155.

<https://doi.org/10.5465/amj.2013.1165>

- Balland, P.-A., Belso-Martínez, J. A., & Morrison, A. (2016). The dynamics of technical and business knowledge networks in industrial clusters: Embeddedness, status, or proximity? *Economic Geography*, 92(1), 35-60.
- Bardin, L. (1977). *L'analyse de contenu* (Vol. 69). Presses universitaires de France Paris.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Baron, R. A., & Markman, G. D. (2018). Toward a process view of entrepreneurship: The changing impact of individual-level variables across phases of new firm development. *Current topics in management*, 9, 45-63.
- Barratt, M., Choi, T. Y., & Li, M. (2011). Qualitative case studies in operations management: Trends, research outcomes, and future research implications. *Journal of operations management*, 29(4), 329-342.
- Bass, F. M. (1969). A New Product Growth for Model Consumer Durables. *Management science*, 15(5), 215-227. <http://www.jstor.org/stable/2628128>
- Bates, T. (1990). Entrepreneur human capital inputs and small business longevity. *The Review of Economics and Statistics*, 551-559.
- Baumol, W. J. (2010). The microtheory of innovative entrepreneurship. In *The Microtheory of Innovative Entrepreneurship*. Princeton University Press.
- Baumol, W. J., Schilling, M. A., & Wolff, E. N. (2009). The superstar inventors and entrepreneurs: How were they educated? *Journal of Economics & Management Strategy*, 18(3), 711-728.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago press.
- Beer, A., Weller, S., Barnes, T., Onur, I., Ratcliffe, J., Bailey, D., & Sotarauta, M. (2019). The urban and regional impacts of plant closures: new methods and perspectives. *Regional Studies, Regional Science*, 6(1), 380-394.
- Bergek, A., Jacobsson, S., Carlsson, B., Lindmark, S., & Rickne, A. (2008). Analyzing the functional dynamics of technological innovation systems: A scheme of analysis. *Research Policy*, 37(3), 407-429.
- Berlemann, M., & Jahn, V. (2016). Regional importance of Mittelstand firms and innovation performance. *Regional Studies*, 50(11), 1819-1833.
- Bhave, M. P. (1994). A process model of entrepreneurial venture creation. *Journal of business venturing*, 9(3), 223-242.
- Binz, C., Truffer, B., & Coenen, L. (2016). Path creation as a process of resource alignment and anchoring: Industry formation for on-site water recycling in Beijing. *Economic Geography*, 92(2), 172-200.
- Bird, B. (1988). Implementing Entrepreneurial Ideas: The Case for Intention. *The Academy of Management Review*, 13(3), 442-453. <https://doi.org/10.2307/258091>
- Bitektine, A. (2011). Toward a theory of social judgements of organization: The case of legitimacy, reputation and status. *The Academy of Management Review*, 36(1), 151-179. <http://www.jstor.org/stable/29765019>
- Blanchard, O., & Katz, L. F. (1992). Regional Evolutions *Brooking Papers on Economic Activity*, 23(1), 76.
- Brettle, H., Forshaw, J., Auburn, J., Blackerby, C., & Okada, N. (2019). Towards a future debris removal service: evolution of an ADR business model. 70th International Astronautical Congress,
- Brixy, U. (2014). The significance of entry and exit for regional productivity growth. *Regional Studies*, 48(6), 1051-1070.
- Brush, C. G., Patricia, G. G., Myra, M. H., & Harold, S. H. (2001). From Initial Idea to

- Unique Advantage: The Entrepreneurial Challenge of Constructing a Resource Base [and Executive Commentary]. *The Academy of Management Executive* (1993-2005), 15(1), 64-80. <http://www.jstor.org/stable/4165711>
- Bruyat, C., & Julien, P. A. (2001). Defining the field of research in entrepreneurship. *Journal of Business Venturing*, 16(2), 165-180. [https://doi.org/https://doi.org/10.1016/S0883-9026\(99\)00043-9](https://doi.org/https://doi.org/10.1016/S0883-9026(99)00043-9)
- Butcher, M. (2016). *The Brexit hangover has left UK startups drained - Are the brains next?* Retrieved 29/06/2022 from <https://techcrunch.com/2016/07/09/the-brexit-hangover-has-left-uk-startups-drained-are-the-brains-next/>
- Butler, J. S., Garg, R., & Stephens, B. (2020). Social networks, funding, and regional advantages in technology entrepreneurship: An empirical analysis. *Information Systems Research*, 31(1), 198-216.
- Caiazza, R., Belitski, M., & Audretsch, D. B. (2020). From latent to emergent entrepreneurship: the knowledge spillover construction circle. *The Journal of Technology Transfer*, 45, 694-704.
- Cairncross, F. (2001). The death of distance 2.0. *London: Texere*.
- Castaldi, C., & Dosi, G. (2006). The grip of history and the scope for novelty: some results and open questions on path dependence in economic processes. In *Understanding Change* (pp. 99-128). Springer.
- Cavallo, A., Ghezzi, A., & Balocco, R. (2019). Entrepreneurial ecosystem research: present debates and future directions. *International Entrepreneurship and Management Journal*, 15(4), 1291-1321. <https://doi.org/10.1007/s11365-018-0526-3>
- Chen, A. (2021). *The Cold Start Problem: How to Start and Scale Network Effects*. HarperCollins.
- Chen, L.-W., & Thompson, P. (2016). Skill Balance and Entrepreneurship Evidence from Online Career Histories. *Entrepreneurship theory and practice*, 40(2), 289-305. <https://doi.org/10.1111/etap.12220>
- Choi, Y. R., Lévesque, M., & Shepherd, D. (2008). When Should Entrepreneurs Expedite or Delay Opportunity Exploitation? *Journal of business venturing*, 23, 333-355. <https://doi.org/10.1016/j.jbusvent.2006.11.001>
- Chrisman, J. J., Bauerschmidt, A., & Hofer, C. W. (1998). The determinants of new venture performance: An extended model. *Entrepreneurship theory and practice*, 23(1), 5-29.
- Cliff, J. E., Jennings, P. D., & Greenwood, R. (2006). New to the game and questioning the rules: The experiences and beliefs of founders who start imitative versus innovative firms. *Journal of Business Venturing*, 21(5), 633-663. <https://doi.org/https://doi.org/10.1016/j.jbusvent.2005.02.010>
- Cohen, S. L., Bingham, C. B., & Hallen, B. L. (2019). The role of accelerator designs in mitigating bounded rationality in new ventures. *Administrative Science Quarterly*, 64(4), 810-854.
- Colombo, M. G., Delmastro, M., & Grilli, L. (2004). Entrepreneurs' human capital and the start-up size of new technology-based firms. *International journal of industrial organization*, 22(8-9), 1183-1211.
- Colombo, M. G., & Grilli, L. (2005). Founders' human capital and the growth of new technology-based firms: A competence-based view. *Research Policy*, 34(6), 795-816.
- Cooper, A. C., Gimeno-Gascon, F. J., & Woo, C. Y. (1994). Initial human and financial capital as predictors of new venture performance. *Journal of business venturing*, 9(5), 371-395.
- Cornelissen, J., Granqvist, N., Grodal, S., & Lounsbury, M. (2017). Call for papers for a

- special issue on culture, innovation and entrepreneurship. *Innovation*, 19(3), 400-402. <https://doi.org/10.1080/14479338.2017.1331556>
- Dahl, M. S., Østergaard, C. R., & Dalum, B. (2010). Emergence of regional clusters: the role of spinoffs in the early growth process. In *The handbook of evolutionary economic geography*. Edward Elgar Publishing.
- Dahl, M. S., & Pedersen, C. Ø. (2004). Knowledge flows through informal contacts in industrial clusters: myth or reality? *Research Policy*, 33(10), 1673-1686.
- Dahl, M. S., & Sorenson, O. (2009). The embedded entrepreneur. *European Management Review*, 6(3), 172-181. <https://doi.org/https://doi.org/10.1057/emr.2009.14>
- Dahl, M. S., & Sorenson, O. (2010). The social attachment to place. *Social Forces*, 89(2), 633-658.
- Dahl, M. S., & Sorenson, O. (2012). Home sweet home: Entrepreneurs' location choices and the performance of their ventures. *Management science*, 58(6), 1059-1071.
- Daimon, S. (2017). *Astroscale exec to boldly clean where no one has cleaned before*. The Japan Times. <https://www.japantimes.co.jp/news/2017/08/13/national/astroscale-exec-boldly-clean-no-one-cleaned/>
- Davidsson, P. (1995). Culture, structure and regional levels of entrepreneurship. *Entrepreneurship & Regional Development*, 7(1), 41-62.
- Davidsson, P. (2023). Ditching discovery-creation for unified venture creation research. *Entrepreneurship theory and practice*, 47(2), 594-612.
- Davidsson, P., & Gruenhagen, J. H. (2021). Fulfilling the process promise: A review and agenda for new venture creation process research. *Entrepreneurship theory and practice*, 45(5), 1083-1118.
- Davidsson, P., Recker, J., & Briel, F. v. (2020). External Enablement of New Venture Creation: A Framework. *Academy of Management Perspectives*, 34(3), 311-332. <https://doi.org/10.5465/amp.2017.0163>
- De Massis, A., Frattini, F., Kotlar, J., Messeni Petruzzelli, A., & Wright, M. (2016). Innovation through tradition: The success secrets of innovative family businesses. *Academy of Management Perspectives*, 1-15.
- Dencker, J. C., Bacq, S., Gruber, M., & Haas, M. (2021). Reconceptualizing necessity entrepreneurship: A contextualized framework of entrepreneurial processes under the condition of basic needs. *Academy of management review*, 46(1), 60-79.
- Desa, G., & Basu, S. (2013). Optimization or bricolage? Overcoming resource constraints in global social entrepreneurship. *Strategic Entrepreneurship Journal*, 7(1), 26-49.
- Donaldson, C., Liñán, F., & Alegre, J. (2021). Entrepreneurial Intentions: Moving the Field Forwards. *The Journal of Entrepreneurship*, 30(1), 30-55. <https://doi.org/10.1177/0971355720974801>
- Drejer, I., Holm, J. R., & Nielsen, K. (2022). University graduates in metropolitan and peripheral areas: mobility, occupational choice and outcomes. *Regional Studies*, 56(6), 989-1000. <https://doi.org/10.1080/00343404.2021.1905788>
- Drori, I., & Honig, B. (2013). A process model of internal and external legitimacy. *Organization Studies*, 34(3), 345-376.
- Dyer, J. H., Gregersen, H. B., & Christensen, C. (2008). Entrepreneur behaviors, opportunity recognition, and the origins of innovative ventures. *Strategic Entrepreneurship Journal*, 2(4), 317-338.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, 14(4), 532-550.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of management journal*, 50(1), 25-32.
- Eisenmann, T. R. (2021). *Why startups fail*. Random House Audio.

- Feldman, M. (2003). The locational dynamics of the US biotech industry: knowledge externalities and the anchor hypothesis. *Industry and innovation*, 10(3), 311-329.
- Frederiksen, L., Wennberg, K., & Balachandran, C. (2016). Mobility and entrepreneurship: Evaluating the scope of knowledge-based theories of entrepreneurship. *Entrepreneurship theory and practice*, 40(2), 359-380.
- Fritsch, M., & Falck, O. (2007). New business formation by industry over space and time: A multidimensional analysis. *Regional Studies*, 41(2), 157-172.
- Fritsch, M., & Wyrwich, M. (2018). Regional knowledge, entrepreneurial culture, and innovative start-ups over time and space—an empirical investigation. *Small Business Economics*, 51(2), 337-353. <https://doi.org/10.1007/s11187-018-0016-6>
- Furr, N., & Ahlstrom, P. (2011). *Nail it then scale it: the entrepreneur's guide to creating and managing breakthrough innovation*.
- Galor, O., & Tsiddon, D. (1997). The distribution of human capital and economic growth. *Journal of Economic Growth*, 2(1), 93-124.
- Garud, R., Gehman, J., & Giuliani, A. P. (2014). Contextualizing entrepreneurial innovation: A narrative perspective. *Research Policy*, 43(7), 1177-1188.
- George, G., & Zahra, S. A. (2002). Culture and its consequences for entrepreneurship. *Entrepreneurship Theory and Practice*, 26(4), 5-8.
- Gherhes, C., Vorley, T., & Brooks, C. (2020). Making Sense of Industrial Decline: how Legacies of the Past Influence the Development of Entrepreneurship Cultures in Formerly Industrialized Places. *Entrepreneurship & Regional Development*, 32(9-10), 899-921. <https://doi.org/10.1080/08985626.2020.1842914>
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic management journal*, 17(S2), 109-122. <https://doi.org/https://doi.org/10.1002/smj.4250171110>
- Grillitsch, M., & Sotarauta, M. (2020). Trinity of change agency, regional development paths and opportunity spaces. *Progress in human geography*, 44(4), 704-723.
- Gu, W., & Qian, X. (2019). Does venture capital foster entrepreneurship in an emerging market? *Journal of Business Research*, 101, 803-810. <https://doi.org/https://doi.org/10.1016/j.jbusres.2018.12.011>
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. *American sociological review*, 149-164.
- Hansen, H. K., Lyngemark, D. H., & Weatherall, C. D. (2021). Migration and employment after an economic shock: Regional characteristics and migration patterns. *Regional Studies*, 55(5), 907-920.
- Hayton, J. C., & Cacciotti, G. (2013). Is there an entrepreneurial culture? A review of empirical research. *Entrepreneurship & Regional Development*, 25(9-10), 708-731.
- Hellmann, T. (2007). Entrepreneurs and the process of obtaining resources. *Journal of Economics & Management Strategy*, 16(1), 81-109.
- Herrmann, A. M. (2019). A plea for varieties of entrepreneurship. *Small Business Economics*, 52(2), 331-343.
- Hervas Oliver, J. L., Lleo, M., & Cervello, R. (2017). The dynamics of cluster entrepreneurship: Knowledge legacy from parents or agglomeration effects? The case of the Castellon ceramic tile district. *Research Policy*, 46(1), 73-92.
- Hoetker, G., & Agarwal, R. (2007). Death hurts, but it isn't fatal: The postexit diffusion of knowledge created by innovative companies. *Academy of management journal*, 50(2), 446-467.
- Huber, F. (2013). Knowledge-sourcing of R&D workers in different job positions: Contextualising external personal knowledge networks. *Research Policy*, 42(1), 167-179.
- Huggins, R., & Thompson, P. (2016). Socio-spatial culture and entrepreneurship: some

- theoretical and empirical observations. *Economic Geography*, 92(3), 269-300.
- Hussler, C. (2004). Culture and knowledge spillovers in Europe: New perspectives for innovation and convergence policies? *Economics of Innovation and New Technology*, 13(6), 523-541.
- Hyytinen, A., Pajarinen, M., & Rouvinen, P. (2015). Does innovativeness reduce startup survival rates? *Journal of Business Venturing*, 30(4), 564-581.
- IMI. (2022). *UK Startup and Innovator Visas Statistics*. Investment Migration Industry. Retrieved 08/06/2023 from
- Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). A Model of Strategic Entrepreneurship: The Construct and its Dimensions. *Journal of Management*, 29(6), 963-989. [https://doi.org/10.1016/S0149-2063\(03\)00086-2](https://doi.org/10.1016/S0149-2063(03)00086-2)
- Jack, S. L., & Anderson, A. R. (2002). The effects of embeddedness on the entrepreneurial process. *Journal of business venturing*, 17(5), 467-487. [https://doi.org/10.1016/S0883-9026\(01\)00076-3](https://doi.org/10.1016/S0883-9026(01)00076-3)
- Javadian, G., Dobratz, C., Gupta, A., Gupta, V. K., & Martin, J. A. (2020). Qualitative Research in Entrepreneurship Studies: A State-of-Science. *The Journal of Entrepreneurship*, 29(2), 223-258. <https://doi.org/10.1177/0971355720930564>
- Jiang, J., Wang, I. Y., & Wang, K. P. (2018). Revolving rating analysts and ratings of mortgage-backed and asset-backed securities: Evidence from LinkedIn. *Management science*, 64(12), 5832-5854.
- Jofre-Monseny, J., Sánchez-Vidal, M., & Viladecans-Marsal, E. (2017). Big plant closures and local employment. *Journal of Economic Geography*, 18(1), 163-186. <https://doi.org/10.1093/jeg/lbx026>
- Kalinic, I., & Forza, C. (2012). Rapid internationalization of traditional SMEs: Between gradualist models and born globals. *International Business Review*, 21(4), 694-707.
- Kalisz, D., Schiavone, F., Riviuccio, G., Viala, C., & Chen, J. (2021). Analyzing the macro-level determinants of user entrepreneurship. The moderating role of the national culture. *Entrepreneurship & Regional Development*, 33(3-4), 185-207. <https://doi.org/10.1080/08985626.2021.1872934>
- Katz, J., & Gartner, W. B. (1988). Properties of emerging organizations. *Academy of management review*, 13(3), 429-441.
- Kibler, E., Kautonen, T., & Fink, M. (2014). Regional social legitimacy of entrepreneurship: Implications for entrepreneurial intention and start-up behaviour. *Regional Studies*, 48(6), 995-1015.
- Kirtley, J., & O'Mahony, S. (2020). What is a pivot? Explaining when and how entrepreneurial firms decide to make strategic change and pivot. *Strategic management journal*.
- Klein, J. I. (1990). Feasibility theory: A resource-munificence model of work motivation and behavior. *Academy of management review*, 15(4), 646-665.
- Koellinger, P. (2008). Why are some entrepreneurs more innovative than others? *Small Business Economics*, 31, 21-37. <https://doi.org/10.1007/s11187-008-9107-0>
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3(3), 383-397.
- Kumar, N., Scheer, L., & Kotler, P. (2000). From market driven to market driving. *European management journal*, 18(2), 129-142.
- Kuratko, D. F., Fisher, G., Bloodgood, J. M., & Hornsby, J. S. (2017). The paradox of new venture legitimation within an entrepreneurial ecosystem. *Small Business Economics*, 49(1), 119-140.
- Laursen, K., Masciarelli, F., & Prencipe, A. (2012). Trapped or spurred by the home region? The effects of potential social capital on involvement in foreign markets for

- goods and technology. *Journal of International Business Studies*, 43(9), 783-807.
- Lee, S., & Kim, J. D. (2022). When Do Startups Scale? Large-scale Evidence from Job Postings. *Academy of Management Proceedings*, 2022(1), 12158. <https://doi.org/10.5465/AMBPP.2022.12158abstract>
- Li, J., Qu, J., & Huang, Q. (2018). Why are some graduate entrepreneurs more innovative than others? The effect of human capital, psychological factor and entrepreneurial rewards on entrepreneurial innovativeness. *Entrepreneurship & Regional Development*, 30(5-6), 479-501. <https://doi.org/10.1080/08985626.2017.1406540>
- Lichtenstein, B. M. B., & Brush, C. G. (2001). How Do “Resource Bundles” Develop and Change in New Ventures? A Dynamic Model and Longitudinal Exploration. *Entrepreneurship theory and practice*, 25(3), 37-58. <https://doi.org/10.1177/104225870102500303>
- Lounsbury, M., & Glynn, M. A. (2001). Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22(6-7), 545-564.
- MacKinnon, D. (2017). Labour branching, redundancy and livelihoods: Towards a more socialised conception of adaptation in evolutionary economic geography. *Geoforum*, 79, 70-80.
- Marcon, A., & Ribeiro, J. L. D. (2021). How do startups manage external resources in innovation ecosystems? A resource perspective of startups’ lifecycle. *Technological Forecasting and Social Change*, 171, 120965.
- Markusen, A. (1996). Sticky Places in Slippery Space: A Typology of Industrial Districts. *Economic Geography*, 72(3), 293-313. <https://doi.org/10.2307/144402>
- Marquis, C., & Battilana, J. (2009). Acting globally but thinking locally? The enduring influence of local communities on organizations. *Research in organizational behavior*, 29, 283-302.
- Marvel, M. R. (2013). Human capital and search-based discovery: A study of high-tech entrepreneurship. *Entrepreneurship theory and practice*, 37(2), 403-419.
- Mason, C. M., & Harrison, R. T. (2006). After the exit: Acquisitions, entrepreneurial recycling and regional economic development. *Regional Studies*, 40(1), 55-73.
- McMullen, J. S., & Dimov, D. (2013). Time and the Entrepreneurial Journey: The Problems and Promise of Studying Entrepreneurship as a Process. *Journal of Management Studies*, 50(8), 1481-1512. <https://doi.org/https://doi.org/10.1111/joms.12049>
- Messeni Petruzzelli, A., Albino, V., & Carbonara, N. (2009). External knowledge sources and proximity. *Journal of Knowledge Management*, 13(5), 301-318.
- Messeni Petruzzelli, A., Natalicchio, A., & Albino, V. (2020). Moving ahead looking back: The strategic role of tradition. *International Studies in Entrepreneurship*, 27-35.
- Messeni Petruzzelli, A., & Savino, T. (2015). Reinterpreting tradition to innovate: The case of Italian haute cuisine. *Industry and Innovation*, 22(8), 677-702.
- METI. (2015). The smart, practical way to use space. *METI Journal*. https://www.meti.go.jp/english/publications/pdf/journal2015_11b.pdf
- Michelacci, C., & Silva, O. (2007). Why So Many Local Entrepreneurs? *The Review of Economics and Statistics*, 89(4), 615-633. <https://doi.org/10.1162/rest.89.4.615>
- MISE. (2020). *Italia Startup Visa&Hub*. M. d. S. Economico. https://www.mimit.gov.it/images/stories/documenti/ISVH-1-rapporto-trimestrale-2019-08_04_2019.pdf
- Muñoz, P., Kibler, E., Mandakovic, V., & Amorós, J. E. (2022). Local entrepreneurial ecosystems as configural narratives: A new way of seeing and evaluating antecedents and outcomes. *Research Policy*, 51(9), 104065.
- Navis, C., & Glynn, M. A. (2011). Legitimate distinctiveness and the entrepreneurial

- identity: Influence on investor judgments of new venture plausibility. *Academy of management review*, 36(3), 479-499.
- Nelson, R. R. (1985). *An evolutionary theory of economic change*. harvard university press.
- Newbert, S. L. (2005). New firm formation: A dynamic capability perspective. *Journal of small business management*, 43(1), 55-77.
- Nijkamp, P. (2003). Entrepreneurship in a modern network economy. *Regional Studies*, 37(4), 395-405.
- Nyström, K. (2020). Entrepreneurship after displacement. *Small Business Economics*, 54, 475-494.
- Omoredede, A., & Axelsson, K. (2022). Exploring the Immigrant Entrepreneurs and Their Entrepreneurial Engagement. *The Journal of Entrepreneurship*, 31(2), 330-363. <https://doi.org/10.1177/09713557221096879>
- Onetti, A. G., Daniel. (2017). *European dual companies scaleup migration?*
- Owen-Smith, J., & Powell, W. W. (2004). Knowledge networks as channels and conduits: The effects of spillovers in the Boston biotechnology community. *Organization Science*, 15(1), 5-21.
- Paschen, J. (2017). Choose wisely: Crowdfunding through the stages of the startup life cycle. *Business Horizons*, 60(2), 179-188. <https://doi.org/https://doi.org/10.1016/j.bushor.2016.11.003>
- Picken, J. C. (2017). From startup to scalable enterprise: Laying the foundation. *Business Horizons*, 60(5), 587-595. <https://doi.org/https://doi.org/10.1016/j.bushor.2017.05.002>
- Prasad, A., & Prasad, P. (2002). The Coming of Age of Interpretive Organizational Research. *Organizational Research Methods*, 5(1), 4-11. <https://doi.org/10.1177/1094428102051002>
- Qian, H., & Acs, Z. J. (2013). An absorptive capacity theory of knowledge spillover entrepreneurship. *Small Business Economics*, 40, 185-197.
- Renko, M. (2013). Early challenges of nascent social entrepreneurs. *Entrepreneurship theory and practice*, 37(5), 1045-1069.
- Ritter, T., & Pedersen, C. L. (2022). An Entrepreneur's Guide to Surviving the "Death Valley Curve". *Harvard Business Review Digital Articles*.
- Romero, T. (2019). *How dancing satellites from Japan will clean up outer space*. <https://www.disruptingjapan.com/how-dancing-satellites-from-japan-will-clean-up-outer-space/>
- Roundy, P. T., & Fayard, D. (2019). Dynamic Capabilities and Entrepreneurial Ecosystems: The Micro-Foundations of Regional Entrepreneurship. *The Journal of Entrepreneurship*, 28(1), 94-120. <https://doi.org/10.1177/0971355718810296>
- Samuelsson, M., & Davidsson, P. (2009). Does venture opportunity variation matter? Investigating systematic process differences between innovative and imitative new ventures. *Small Business Economics*, 33(2), 229-255. <https://doi.org/10.1007/s11187-007-9093-7>
- Schertler, A., & Tykvová, T. (2011). Venture capital and internationalization. *International Business Review*, 20(4), 423-439. <https://doi.org/https://doi.org/10.1016/j.ibusrev.2010.07.009>
- Schmitt, A., Rosing, K., Zhang, S. X., & Leatherbee, M. (2018). A dynamic model of entrepreneurial uncertainty and business opportunity identification: exploration as a mediator and entrepreneurial self-efficacy as a moderator. *Entrepreneurship Theory and Practice*, 42(6), 835-859. <https://doi.org/10.1177/1042258717721482>
- Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. Harper and Brothers.
- Seek Sustainable Japan. (2021). *How to Be Sustainable in Outer Space*, YouTube.

- https://youtu.be/_KfIH9Ov1I
- Shane, S. (2009). Why encouraging more people to become entrepreneurs is bad public policy. *Small Business Economics*, 33(2), 141-149. <https://doi.org/10.1007/s11187-009-9215-5>
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of management review*, 25(1), 217-226.
- Shane, S. A. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Edward Elgar Publishing.
- Shepherd, D. A., Douglas, E. J., & Shanley, M. (2000). New venture survival: Ignorance, external shocks, and risk reduction strategies. *Journal of business venturing*, 15(5-6), 393-410.
- Shepherd, D. A., Souitaris, V., & Gruber, M. (2021). Creating New Ventures: A Review and Research Agenda. *Journal of Management*, 47(1), 11-42. <https://doi.org/10.1177/0149206319900537>
- Siggelkow, N. (2007). Persuasion with case studies. *Academy of management journal*, 50(1), 20-24.
- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource Orchestration to Create Competitive Advantage: Breadth, Depth, and Life Cycle Effects. *Journal of Management*, 37(5), 1390-1412. <https://doi.org/10.1177/0149206310385695>
- Sorenson, O. (2017). Regional ecologies of entrepreneurship. *Journal of Economic Geography*, 17(5), 959-974.
- Sorenson, O. (2018). Social networks and the geography of entrepreneurship. *Small Business Economics*, 51(3), 527-537. <https://doi.org/10.1007/s11187-018-0076-7>
- Soto-Simeone, A., Sirén, C., & Antretter, T. (2020). New Venture Survival: A Review and Extension. *International Journal of Management Reviews*, 22(4), 378-407. <https://doi.org/https://doi.org/10.1111/ijmr.12229>
- Spigel, B. (2013). Bourdieuan approaches to the geography of entrepreneurial cultures. *Entrepreneurship & Regional Development*, 25(9-10), 804-818.
- Spigel, B. (2017). The relational organization of entrepreneurial ecosystems. *Entrepreneurship theory and practice*, 41(1), 49-72.
- Spigel, B., & Vinodrai, T. (2021). Meeting its Waterloo? Recycling in entrepreneurial ecosystems after anchor firm collapse. *Entrepreneurship & Regional Development*, 33(7-8), 599-620.
- Stam, E. (2007). Why Butterflies Don't Leave: Locational Behavior of Entrepreneurial Firms. *Economic Geography*, 83(1), 27-50. <https://doi.org/https://doi.org/10.1111/j.1944-8287.2007.tb00332.x>
- Stam, E. (2015). Entrepreneurial Ecosystems and Regional Policy: A Sympathetic Critique. *European Planning Studies*, 23(9), 1759-1769. <https://doi.org/10.1080/09654313.2015.1061484>
- Startup Genome. (2021). *The Global Startup Ecosystem Report 2021*. <https://startupgenome.com/reports/gser2021>
- Steigertahl, L., & Mauer, R. (2021). Investigating the success factors of the Nordic entrepreneurial ecosystem – talent transformation as a key process. *The International Journal of Entrepreneurship and Innovation*, 0(0), 14657503211051217. <https://doi.org/10.1177/14657503211051217>
- Sternberg, R. (2022). Entrepreneurship and geography—some thoughts about a complex relationship. *The Annals of Regional Science*, 69(3), 559-584. <https://doi.org/10.1007/s00168-021-01091-w>
- Stinchcombe, A. L. (1965). Social structure and organizations. *Handbook of organizations*, 44(2), 142-193.

- Stuart, T. E., & Sorenson, O. (2005). Social networks and entrepreneurship. *Handbook of entrepreneurship research: Interdisciplinary perspectives*, 233-252.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management Review*, 20(3), 571-610.
- Suzuki, K.-i., Kim, S.-H., & Bae, Z.-T. (2002). Entrepreneurship in Japan and Silicon Valley: a comparative study. *Technovation*, 22(10), 595-606.
[https://doi.org/https://doi.org/10.1016/S0166-4972\(01\)00099-2](https://doi.org/https://doi.org/10.1016/S0166-4972(01)00099-2)
- Sweeney, G. P. (1991). Technical culture and the local dimension of entrepreneurial vitality. *Entrepreneurship & Regional Development*, 3(4), 363-378.
- Testa, G., Compañó, R., Correia, A., & Rückert, E. (2022). In search of EU unicorns-What do we know about them? In search of EU unicorns-What do we know about them?,
- Thompson, T. A., Purdy, J. M., & Ventresca, M. J. (2018). How entrepreneurial ecosystems take form: Evidence from social impact initiatives in Seattle. *Strategic Entrepreneurship Journal*, 12(1), 96-116.
- Trabucchi, D., Talenti, L., & Buganza, T. (2019). How do big bang disruptors look like? A business model perspective. *Technological Forecasting and Social Change*, 141, 330-340.
- Vance, C. M., McNulty, Y., Paik, Y., & D'Mello, J. (2016). The expat-preneur: conceptualizing a growing international career phenomenon. *Journal of Global Mobility*.
- Vivarelli, M. (2013). Is entrepreneurship necessarily good? Microeconomic evidence from developed and developing countries. *Industrial and corporate change*, 22(6), 1453-1495.
- Vogel, P. (2017). From venture idea to venture opportunity. *Entrepreneurship theory and practice*, 41(6), 943-971.
- Von Briel, F., Davidsson, P., & Recker, J. (2018). Digital Technologies as External Enablers of New Venture Creation in the IT Hardware Sector. *Entrepreneurship theory and practice*, 42, 47-69. <https://doi.org/10.1177/1042258717732779>
- Voss, C. (2010). Case research in operations management. In *Researching operations management* (pp. 176-209). Routledge.
- Weeden, C., Blackerby, C., Okada, N., Yamamoto, E., Forshaw, J., & Auburn, J. (2019). Industry Implementation of the Long-Term Sustainability Guidelines: An Astroscale Perspective. 70th International Astronautical Congress,
- Wigren-Kristoferson, C., Brundin, E., Hellerstedt, K., Stevenson, A., & Aggestam, M. (2022). Rethinking embeddedness: a review and research agenda. *Entrepreneurship & Regional Development*, 1-25. <https://doi.org/10.1080/08985626.2021.2021298>
- Williams, T. A., & Shepherd, D. A. (2016). Building resilience or providing sustenance: Different paths of emergent ventures in the aftermath of the Haiti earthquake. *Academy of management journal*, 59(6), 2069-2102.
- Xu, B., Yu, H., & Li, L. (2021). The impact of entrepreneurship on regional economic growth: a perspective of spatial heterogeneity. *Entrepreneurship & Regional Development*, 33(3-4), 309-331. <https://doi.org/10.1080/08985626.2021.1872940>
- Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). sage.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of management journal*, 38(2), 341-363.
- Zhang, J. (2016). Facilitating exploration alliances in multiple dimensions: the influences of firm technological knowledge breadth. *R&d Management*, 46(S1), 159-173.
- Zhou, L., Barnes, B. R., & Lu, Y. (2010). Entrepreneurial proclivity, capability upgrading and performance advantage of newness among international new ventures. *Journal of International Business Studies*, 41(5), 882-905.

- Zider, B. (1998). How venture capital works. *Harvard business review*, 76(6), 131-139.
- Zimmerman, M. A., & Zeitz, G. J. (2002). Beyond survival: Achieving new venture growth by building legitimacy. *Academy of Management Review*, 27(3), 414-431.

APPENDIX A1. REFERENCES FOR THE ASTROSCALE CASE STUDY.

Academic Papers	<ul style="list-style-type: none"> • Cole, M. A, Robert J.R.E., & Toshihiro O. (2010). Trade, environmental regulations and industrial mobility: An industry-level study of Japan. <i>Ecological Economics</i>, 69 (10):1995-2002. • Ito, K. (2005). A history of manga in the context of Japanese culture and society. <i>Journal of Popular Culture</i>, 38(3), 456-475. • Kimura, S., Eijiro A., Taro K., Kohei F., & Ryan P. (2021). Low-cost and high-performance visual guidance and navigation system for space debris removal. <i>Advanced Robotics</i>, 35 (21-22):1277-85. • Murakami, S., & Bryce, M. (2010). Manga as an Educational Medium. <i>International Journal of the Humanities</i>, 7(10). • Mintz, K. K., Henn, L., Park, J. & Kurman J. (2019). What predicts household waste management behaviors? Culture and type of behavior as moderators. <i>Resources, Conservation and Recycling</i>, 145:11-8. • Ong, I. B. L., & Sovacool B.K. (2012). A comparative study of littering and waste in Singapore and Japan. <i>Resources, Conservation and Recycling</i>, 61:35-42. • Šabanović, S. (2014). Inventing Japan's 'robotics culture': The repeated assembly of science, technology, and culture in social robotics. <i>Social Studies of Science</i>, 44 (3):342-67. • Sumikura, I. (1998). A brief history of Japanese environmental administration: a qualified success story. <i>Journal of Environmental Law</i>, 10:241. • Weinzierl, M., Acocella A., & Yamazaki, M., (2016). <i>Astroscale, Space Debris, and Earth's Orbital Commons</i>. Harvard Business School
Books	<ul style="list-style-type: none"> • Schodt, F. L. (1988). <i>Inside the robot kingdom</i>: Kodansha International.
Conference Papers	<ul style="list-style-type: none"> • Brettle, H., Ziadlourad, A., Lindsay, M., Forshaw, J. & Auburn, J. (2020). Commercial incentives for debris removal services. Paper presented at the Proceedings of the International Astronautical Congress, IAC. • Brettle, H., Forshaw, J., Auburn, J., Blackerby, C., & Okada, N. (2019). Towards a future debris removal service: evolution of an ADR business model. Paper presented at the 70th International Astronautical Congress. • Forshaw, J., Aglietti, G., Salmon, T., Retat, I., Burgess, C., Chabot, T., Pisseloup, A., Phipps, A., Bernal, C., & Pollini, A. (2017). The Remove Debris ADR mission: preparing for an international space station launch. Paper presented at the 7th European Conference on Space Debris. • Iwamoto, T. (2016). Dream-based social innovation. Paper presented at the 2016 Portland international conference on management of engineering and technology (PICMET). • Iwasaki, K. (2016). "The Rising of Japanese Startups in Southeast Asia." <i>Pacific Business and Industries</i>. • Weeden, C., Blackerby, C., Okada, N., Yamamoto, E., Forshaw, J., & Auburn, J. (2019). Industry Implementation of the Long-Term Sustainability Guidelines: An Astroscale Perspective. Paper presented at the 70th International Astronautical Congress.
Official Documents	<ul style="list-style-type: none"> • Innovation Network Corporation of Japan. (2016). "INJC to invest in Astroscale PTE. LTD." In. • Japan Space Forum. (2014). "Infrastructure Development Program for Promoting International Scientific and Technological Cooperation." In. <i>International Symposium on Sustainable Space Development and Utilization for Humankind</i>. • METI. (2015). "The smart, practical way to use space." <i>METI Journal</i>.

Websites	<ul style="list-style-type: none"> • Agence France-Press. (2022). "Japan pushes space sustainability." The Manila Times. Retrieved September 19, 2022, from https://www.manilatimes.net/2022/07/09/news/world/japan-pushes-space-sustainability/1850284 • Astroscale. (2015). Facebook Posts. Retrieved March 18, 2022, from https://www.facebook.com/Astroscale/posts/876206052425637 • Astroscale. (2017). Astroscale Raises a Total of \$25 Million in Series C Led By Private Companies. Retrieved March 18, 2022, from https://astroscale.com/astroscale-raises-a-total-of-25-million-in-series-c-led-by-private-companies/ • Astroscale. (2020) Astroscale Selected as Commercial Partner for JAXA's Commercial Removal of Debris Demonstration Project. Retrieved March 18, 2022, from https://astroscale.com/astroscale-selected-as-commercial-partner-for-jaxas-commercial-removal-of-debris-demonstration-project/ • Astroscale. (2022). Astroscale's ELSA-d Debris Removal Mission Receives Award From Cabinet Office, Government of Japan. Retrieved September 19, 2022, from https://astroscale.com/astroscales-elsa-d-debris-removal-mission-receives-award-from-cabinet-office-government-of-japan/ • Dentsu Creative. (2016). Space Sweepers Academy. Retrieved February 11, 2022, from https://www.dentsucreative.com/en-fr/case-studies/singapore/2016/december/space-sweepers-academy • eoPortal Directory. (2017). IDEA OSG 1 (In-situ Debris Environmental Awareness). eoPortal Directory. Retrieved March 18, 2022, from https://directory.eoportal.org/web/eoportal/satellite-missions/i/idea-osg-1. • Fackler, M. (2016). Space's Trash Collector? A Japanese Entrepreneur Wants the job. The New York Timers. Retrieved March 18, 2022, from https://www.nytimes.com/2016/11/28/science/space-junk-astroscale.html • Foster, S. (2022). Japan cosmic cleanup firm is part of space arms race. Asia Times. Retrieved March 18, 2022, from https://asiatimes.com/2022/04/japan-cosmic-cleanup-firm-is-part-of-space-arms-race • Foust, J. (2019). Astroscale raises \$30 million, opens U.S. office in Denver. SpaceNews. Retrieved March 18, 2022, from https://spacenews.com/astroscale-raises-30-million-opens-u-s-office-in-denver/ • Hasegawa, K. (2022). Using lasers and 'tow-trucks', Japanese firms target spacedebris. Japan Today. Retrieved March 18, 2022, from https://japantoday.com/category/tech/using-lasers-and-'tow-trucks'-japanese-firms-target-space-debris • Henry, C. (2017). Iridium would pay to deorbit its 30 defunct satellites - for the right price. SpaceNews. Retrieved March 18, 2022, from https://spacenews.com/iridium-would-pay-to-deorbit-its-30-defunct-satellites-for-the-right-price/ • Hunt, J. (2014). Putting a sports drink on the Moon. The New Yorker. Retrieved March 25, 2022, from https://www.newyorker.com/business/currency/putting-a-sports-drink-on-the-moon • IDEA OSG 1. (2016). Construction of IDEA OSG 1. IDEA OSG 1. Retrieved March 18, 2022, from https://www.ideaosgl.com/en/technology/ • Ikeda, M. (2016). Japan space-debris removal startup Astroscale raises \$35M in series B. The Bridge. Retrieved March 25, 2022, https://thebridge.jp/en/2016/03/astroscale-secures-35-million-in-series-b. • IMDb. Planetes. Retrieved February 11, 2022, from https://www.imdb.com/title/tt0816398/ • INCJ. (2016). "スペース・デブリ除去技術の開発およびサービスを提供するASTROSCALE PTE. LTD.への出資を決定." Innovation Network
----------	---

	<p>Corporation of Japan. Retrieved March 18, 2022, from https://www.incj.co.jp/newsroom/2016/20160301.html.</p> <ul style="list-style-type: none"> • INCJ. (2017). "より持続性のある宇宙開発のために、スペースデブリ除去に取り組む." Innovation Network Corporation of Japan. Retrieved March 18, 2022, from https://www.incj.co.jp/performance/casestudy/astroscale.html. • Innovative Platform for The University of Tokyo. (2018). 【訂正リリース】アストロスケール社への出資を決定. UTokyo Innovation Platform Co. Retrieved March 18, 2022, from https://www.utokyo-ipc.co.jp/2018/12/astroscale/ • JAXA. (2009). Broadcasting from Space with High-Definition Images. ISS.JAXA. Retrieved 25 March, 2022, from https://iss.jaxa.jp/en/kiboexp/pm/hdtv/ • JAXA. (2017) Harnessing the Power of the Private Sector to Clean Up Space Junk. JAXA. Retrieved March 12, 2022, from https://global.jaxa.jp/article/2017/special/debris/okada.html. • JAXA. Yuki Precision. Aerospacebiz JAXA. Retrieved March 12, 2022, from https://aerospacebiz.jaxa.jp/spacecompany/yuki/. • Jewett, R. (2020). Japan's Space Startup Market Blooms." Satellite Today. Retrieved June 10, 2022, from https://interactive.satellitetoday.com/via/november-2020/japans-space-startup-market-blooms/. • Jozuka, E. (2016). This Satellite Uses Special Glue to Stick to Space Debris Like Flypaper. Vice. Retrieved March 18, 2022, from https://www.vice.com/en/article/aeke5a/this-satellite-uses-special-glue-to-stick-to-space-debris-like-flypaper • Koyama, C. (2015). 宇宙掃除 第六回 ～ルナ・ドリームカプセル・プロジェクト～. Koyamachuya. Retrieved June 10, 2022, from https://koyamachuya.com/column/uchu_souji/7306/ • Leave a Nest. (2015). デブリ回収事業を目指すASTROSCALEと、町工場をつなぐ強い絆 岡田 光信. Leave a Nest Retrieved June 10, 2022, from https://lne.st/2015/06/11/astroscale/ • Lee, T. (2014a). Astroscale's debris sweeping satellite takes a page out of science fiction. TechinAsia.com. Retrieved March 18, 2022, from https://www.techinasia.com/astroscopes-debris-sweeping-satellite-takes-page-science-fiction. • Lee, T. (2014b). This Singapore startup wants to remove killer litter from space. Retrieved March 18, 2022, from https://www.techinasia.com/singapore-startup-remove-killer-litter-space • Littler, J. (2017). Space may soon have its first undertaker for satellites. CNBC. Retrieved March 18, 2022, from https://www.cnbc.com/2017/03/17/space-may-soon-have-its-first-undertaker-for-satellites.html • Matsumura, N. (2021). Japanese Tech Startups Lead as Space Debris Sweepers. Japan Forward. Retrieved March 18, 2022, from https://japan-forward.com/japanese-tech-startups-lead-as-space-debris-sweepers/ • McKinsey Alumni Center. Alum Nobu Okada's race to clean up space. McKinsey Alumni Center. Retrieved March 18, 2022, from https://www.mckinsey.com/alumni/news-and-events/global-news/alumni-news/alum-nobu-okadas-race-to-clean-up-space. • McKinsey & Company Alumni Relations Newsletter. (2016). Focus on Founders: Nobu Okada takes on the threat of space junk with Astroscale” Retrieved March 18, 2022, from https://www.mckinsey.com/~media/mckinsey/alumni%20center/news%20and%
--	---

	<p>20insights/global%20news/alumni%20news/alum%20nobi%20okadas%20race%20to%20clean%20up%20space/nobu_okada_interview%20with%20mckinsey%20alumni%20relations_2016.pdf</p> <ul style="list-style-type: none"> • McKirdy, A. (2016). Company aiming to clear space junk wins funding. The Japan Times. Retrieved March 18, 2022, from https://www.japantimes.co.jp/news/2016/03/01/national/science-health/company-aiming-clear-space-junk-wins-funding/ • Okada, N. (2021). Nobu Okada Tweet. Retrieved March 18, 2022, from https://twitter.com/nobuokada/status/1440879159232794624 • Recruit. (2017). "伊藤美樹が20代で宇宙ゴミ清掃会社「アストロスケール」の社長になった理由." Recruit. Retrieved June 10, 2022, from https://journal.rikunabi.com/p/career/23474.html • Ruehl, M. (2019). Companies vie to develop ways to dispose of space junk. Financial Times. Retrieved March 25, 2022, from https://www.ft.com/content/fe4e89a0-5b51-11e9-939a-341f5ada9d40 • Sayuri, D. (2017). Astroscale exec to boldly clean where no one has cleaned before. The Japan Times. Retrieved March 18, 2022, from https://www.japantimes.co.jp/news/2017/08/13/national/astroscale-exec-boldly-clean-no-one-cleaned/ • Swift, M. (2009). In Japan Manga Teaches Tough Lessons. Ascd. Retrieved March 25, 2022, from https://www.ascd.org/el/articles/in-japan-manga-teaches-tough-lessons • Tech Wire Asia. (2017). Japanese interstellar startups look to Southeast Asia for growth opportunities. Tech Wire Asia. Retrieved March 25, 2022, from https://techwireasia.com/2017/05/japanese-interstellar-startups-look-southeast-asia-growth-opportunities/ • The Japan Journal (2019). Katayama Osamu profiles Tokyo-based orbital debris removal company Astroscale. The Japan Journal. Retrieved March 18, 2022, from https://www.japanjournal.jp/science/technology/pt20190307142245.html. • The Japan Times. (2001). Pocari Sweat gets space-based ad. The Japan Times. Retrieved March 18, 2022, from https://www.japantimes.co.jp/news/2001/10/18/business/pocari-sweat-gets-space-based-ad/. • The Nihon Sanki Shimbu. (2016). オーエスジー 宇宙ゴミ観測衛星のメインスポンサーに. The Nihon Sanki Shimbu. Retrieved June 10, 2022, from https://nihonsanki-shimbun.com /オーエスジー%E3%80%80宇宙ゴミ観測衛星のメインスポン/ • University of Tokyo. Ohsumi, Japan's First Satellite. University of Tokyo. Retrieved March 18, 2022, from https://www.u-tokyo.ac.jp/en/whyutokyo/hongo_hi_009.html • Wagstaff, J. (2014). Your ad in this space: Private companies fund cleanup of orbiting junk. The Japan Times. Retrieved March 18, 2022, from https://www.japantimes.co.jp/news/2014/06/19/national/science-health/ad-space-private-companies-fund-cleanup-orbiting-junk/ • Wall, M. (2015). First Ad on the Moon: Lunar Billboard for Pocari Sweat to Fly in 2016. Space.Com. Retrieved March 18, 2022, from https://www.space.com/30333-moon-billboard-pocari-sweat-sports-drink.html • Wan, F. (2014). Nobu Okada, founder, Astroscale. Retrieved March 18, 2022, from South China Morning Post. https://www.scmp.com/article/1520968/nobu-okada-founder-astroscale • Werner, D. (2014). Former Finance Wonk Wants To (Literally) Clean Up in Space. SpaceNews. Retrieved March 18, 2022, from
--	---

	https://spacenews.com/former-finance-wonk-wants-to-literally-clean-up-in-space/
Videos	<ul style="list-style-type: none"> • Hello Tomorrow. (2020). Cleaning up space debris. YouTube. Retrieved March 19, 2022, from https://www.youtube.com/watch?v=O7N8_P6GKE0 • Seek Sustainable Japan. (2021). How to Be Sustainable in Outer Space. YouTube. Retrieved March 20, 2022, from https://www.youtube.com/watch?v=_KfIH9Ov1I • Slush. (2018). We are dependent on satellite technology. YouTube. Retrieved March 19, 2022, from https://www.youtube.com/watch?v=VUtL4M5DqUM • Tech In Asia. (2014). [Startup Asia Singapore 2014] Arena Battle #1 - #5. YouTube. Retrieved March 19, 2022, from https://www.youtube.com/watch?v=-gsYLkp-Fe0 • TEDx Kyoto. (2018). Miki Ito: Redcing space debris. TEDx Talk. Retrieved March 21, 2022, from https://tedxkyoto.com/en/events/tedxkyoto-2018/reducing-space-debris-miki-ito-tedxkyoto • TEDx Tokyo. (2014). Nobu Okada: Space sweepers. YouTube. Retrieved March 21, 2022, from https://www.youtube.com/watch?v=Ngnu8RM6NYI • Unbond. (2017). Innovfest unbond: Robots in Action. Unbound. Retrieved March 22, 2022, from https://www.youtube.com/watch?v=xd2jJWqPgU
Podcasts	<ul style="list-style-type: none"> • Blackerby, C. (2021). The Real Space Sweepers. Market Scale. Retrieved April 01, 2022, from https://marketscale.com/industries/sciences/the-real-space-sweepers/ • Romero, T. (2018). How Dancing Satellites from Japan Will Clean Up Outer Space. In Disrupting Japan. Retrieved April 02, 2022, from https://www.disruptingjapan.com/how-dancing-satellites-from-japan-will-clean-up-outer-space/